IDAHO DEPARTMENT OF FISH AND GAME

Cal Groen, Director

Project W-170-R-34

Progress Report

BLACK BEAR

Study I, Job 9

July 1, 2009 to June 30, 2010

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TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

LIST OF TABLES

PANHANDLE REGION

CLEARWATER REGION

SOUTHWEST REGION

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF FIGURES

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	1-7	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

STATEWIDE

Abstract

Idaho Department of Fish and Game (Department) mandatory reporting of harvested black bears is required within 10 days of kill. Hunters harvested 2,091 black bears during 2009, a 4% reduction from 2008. Hunters harvested 1,128 in the spring and 963 in the fall. Females comprised 33% of the harvest. Of all the regions, most bears (750, 36%) were harvested in the Clearwater Region, in north central Idaho. There, 3 game management units (GMU) have extra bear tags, allow nonresident hunters to purchase reduced price bear tags ($31.75 vs. $186.00), and encourage increased harvest by outfitters. Bear densities are highest in the moist forests of northern Idaho and decrease heading south toward the drier continental and desert climates. The fewest number of bears was harvested in the Southeast Region (15). Bear baiting is allowed across most of the state, and 41% of bears were harvested using this technique. Still hunting and stalking accounted for 30% of the harvest, incidental harvest accounted for 13%, and hound hunting for 13%. Percentage of adult males in the harvest is monitored to determine trend over time.

There were 30,058 resident and 3,191 nonresident black bear tags sold in 2009. Bear baiting permits are required by anyone hunting over bait with 2,196 baiting permits sold in 2009. Likewise, hunting with hounds requires a permit and nonresident permits are restricted to 70 statewide and a few units with additional permits. In 2009, 2,894 resident and 108 nonresident hound-hunting permits were sold.

Additional monitoring efforts included a non-invasive mark-recapture project by the Southwest region using DNA hair-snags at 77 grid cells in GMU 33 and 34 on the Boise National Forest, in cooperation with Washington State University (WSU). Southwest regional staff also provided technical assistance to WSU in implementing 2 additional DNA hair-snag grids (48 cells each) in GMU 32A and 39, on the Payette and Boise National Forests.

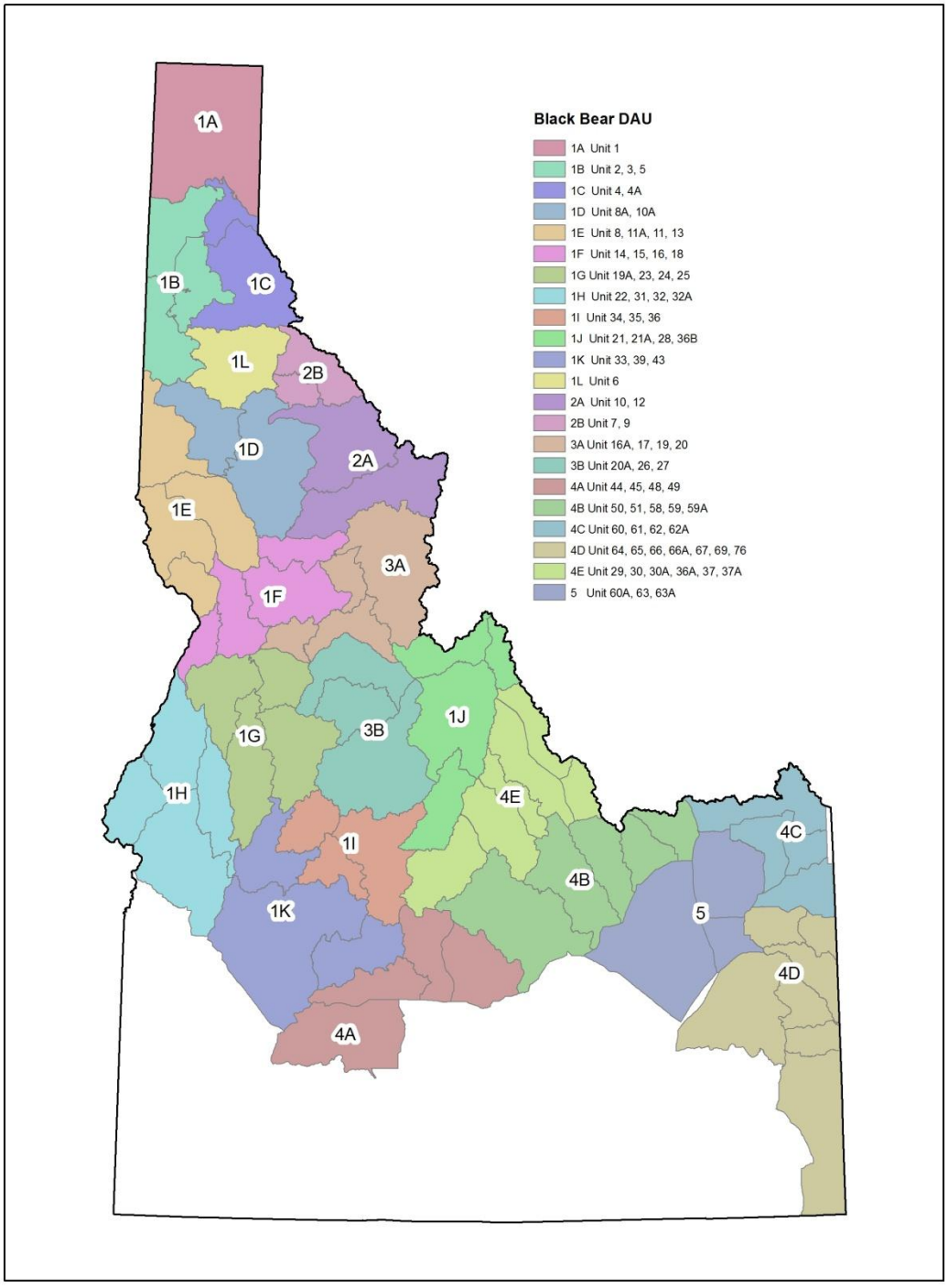

Figure 1. Twenty-two Data Analysis Units (DAU) for black bear management in Idaho.

PROGRESS REPORT
SURVEYS AND INVENTORIES

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE: Idaho
PROJECT: W-170-R-34
SUBPROJECT: 1
STUDY: I
JOB: 9
JOB TITLE: Black Bear Surveys and Inventories
STUDY NAME: Big Game Population Status, Trends, Use, and Associated Habitat Studies
PERIOD COVERED: July 1, 2009 to June 30, 2010

PANHANDLE REGION

Abstract

Reported black bear harvest in Panhandle Region during 2009 was 519 bears, 14% below the previous 3-year average of 608. Female harvest (163) was 26% lower than the previous 3-year average of 219. Male harvest (352) was 9% lower than the previous 3-year average of 387. Thirty-one percent of the harvest was female, and 35% of aged male bears were age class 5 or older. Both indicators are consistent with a population managed under a moderate harvest regime. The 2009 huckleberry crop was very good, likely contributing to the reduced harvest.

The objective for (DAU) 1A is for light harvest and current indicators demonstrate light to moderate harvest. DAUs 1L and 2B are managed for moderate harvest, with DAU 1L demonstrating moderate harvest, and DAU 2B demonstrating light harvest. DAUs 1B and 1C are managed for heavy harvest, with DAU 1B meeting heavy harvest indicators, and DAU 1C meeting light to moderate harvest indicators.

AREA 1

Management Direction

The Department will offer a variety of hunting opportunities in Area 1. DAUs within the area include all harvest categories as defined in the 2000-2010 Black Bear Management Plan. The "reservoir concept" is not a major influence affecting Area 1. That is, harvest data reflect true population characteristics and no reservoir of un-harvested black bears exists to disperse into hunted areas. A controlled hunt allowing use of dogs is provided in a portion of GMU 1 outside the grizzly bear recovery area.

The Panhandle Region includes 4 DAUs in Area 1. DAU 1A is 1 of 2 DAUs statewide managed for light bear harvest characteristics. DAUs 1L and 2B are managed for moderate harvest objectives, while DAU 1B and 1C are managed under heavy harvest objectives.

DAU 1A (GMU 1)

Abstract

Reported harvest of black bear in DAU 1A was 133 during 2009, approximately 31% below the 2006-2008 average. Despite the reduction in total harvest, population composition has changed little during the past 14 years. The percentage of females in the harvest for the most recent 3 years is 33% and the percentage of males in age classes 5+ is 43%.

Management Direction

DAU 1A will be managed to maintain the light harvest targets of <30% females in the harvest and >35% of the males ≥5 years old.

Background

Black bear management is heavily influenced by grizzly bear management needs in this DAU, as it includes parts of the Selkirk and Cabinet-Yaak Grizzly Bear Recovery areas. Consequently, this DAU has been closed to use of bait since 1984 and to use of hounds since 1988. In 1991, a small controlled hunt allowing use of hounds was initiated in a portion of DAU 1A outside of these recovery areas.

In general, dense conifer habitat types characterize this DAU. The climate produces an abundance of huckleberries. Portions of the Selkirk, Cabinet, and Purcell ranges are included in this DAU, with the broad Kootenai River Valley providing the only substantial agricultural area. Overall, DAU 1A likely contains some of the highest-quality black bear habitat in Idaho.

Special Projects

Department Research Biologist John Beecham studied black bears in the Priest Lake portion of the Selkirk Mountains 1979 – 1981. Additional work was conducted in GMU 4 (DAU 1C), and 6 (DAU 1L). The primary focuses of this work were basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August of all 3 years, yielding 314 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994). Don Young, working with Dr. Beecham, completed a Master's Thesis, studying habitat use and food habitats of 4 female and 5 male black bears in this area (Young 1984). During 2001, regional personnel re-trapped Beecham's study area (84 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data).

Grid-based bear DNA sampling was conducted in portions of the Selkirk and Purcell Ranges 2003 – 2006. This cooperative effort between Idaho Department of Fish and Game, U.S. Forest

Service Rocky Mountain Research Station, Idaho Department of Transportation, and University of Idaho included 3 primary projects: development of bear population methods, modeling relative abundance of black bears, and examining the strength of Highway 95 as a barrier to black bear gene flow (a surrogate for grizzly bear gene flow).

GPS-based radio-telemetry of black bears was conducted to model bear crossing areas of Highway 95 in the Purcell Mountains 2004-2006. Locations of 25 black bears, obtained at 20-minute intervals during the study, further defined black bear ecology in northern Idaho, and indicated bears crossed highway 95 in forested areas away from human development. Models developed on 20-minute to 6-hour datasets provided consistent results, while those developed on datasets based on 1 day or longer intervals between locations lacked precision and consistency (Lewis 2007).

For other published literature on these projects see Cushman et al. (2006), Schwartz et al. (2006) and McCall (2009).

Harvest Characteristics

Because bait is prohibited in this DAU and hounds are restricted to a small controlled hunt, most of the harvest is by still-hunting. Eighty-eight percent of the 2009 black bear harvest in DAU 1A was by hunter's specifically seeking and stalking black bear (Table 2).

Approximately 55% of the harvest in this DAU occurs during spring. Nearly all (92%) black bears in DAU 1A were killed with rifles (Table 3). The remaining harvest was accomplished largely with archery equipment (6%). The first 16 days of the fall bear season in DAU 1A is archery-only.

Sex Ratio/Age Structure

The 2007-2009 harvest was composed of 33% females on average, just slightly higher than the target of <30% females in the harvest. Analysis of age structure indicates a relatively old male segment of the population, with 43% of the 2007-2009 male harvest reaching age class 5 or older (Table 4).

Dog-training Seasons

No dog-training season is permitted in DAU 1A (Appendix A) to prevent possible encounters with grizzly bears in and around the Selkirk and Cabinet/Yaak Recovery Areas.

Management Implications

No changes in hunting seasons are indicated by examination of management criteria (Table 5). The 3-year average of 33% females in the harvest is very close to management objective, and appears relatively stable since 1994. Within the male harvest, bears age 5 years and older easily meet management objectives, and are likewise stable since 1994. There are no known problems with low calf elk or fawn deer ratios in this DAU.

DAU 1B (GMUs 2, 3, 5)

Abstract

Reported black bear harvest in DAU 1B was 133 during 2009, nearly identical to the 2006-2008 average of 134 bears (Table 1). Management objectives for a heavy harvest regime are being met in this DAU.

Management Direction

To address depredation concerns in this relatively highly-populated area, DAU 1B will be managed to maintain the heavy harvest targets of <25% age 5+ black bears in the male harvest and >40% females in the total harvest.

Background

DAU 1B consists largely of developed and highly accessible areas. Mountains in this DAU are not particularly high or rugged. Although no data has been recorded in the past few years, depredations have been a substantial problem in this DAU, particularly in GMU 2, which consists largely of second-growth coniferous forest under private ownership. GMU 3 is typified by publicly owned coniferous forest with high road densities in close proximity to Coeur d'Alene. GMU 5 is similar to GMU 2 in the northern third, but the remainder consists largely of open agricultural land with stringers of coniferous forest. Much of GMU 5 is within the boundaries of the Coeur d'Alene Indian Reservation.

Harvest Characteristics

During 2009, harvest using bait was the most predominant method (39%), followed by still hunting (26%) and the use of hounds (23%) (Table 2). Eighty percent of the black bears harvested in DAU 1B were taken with a rifle (Table 3). Twenty-one percent of the harvest in this DAU occurs during spring.

Sex Ratio/Age Structure

The percentage of females in the 2007-2009 harvest was 41%. Eighteen percent of males were ≥5 years old for 2007-2009, within management objectives of less than 25%. This is easily the youngest age structure of the 5 DAUs in the Panhandle Region.

Dog-training Seasons

There is no dog-training season in this DAU (Appendix A) due to the high level of private ownership and high recreational use of public lands near Coeur d'Alene.

Management Implications

Both management criteria meet the heavy harvest targets in the 2000-2010 Black Bear Management Plan (Table 5). There are no known problems with low calf or fawn ratios in this DAU.

DAU 1C (GMUs 4, 4A)

Abstract

Reported black bear harvest in DAU 1C was 135 during 2009; the previous 3-year average was 148 black bears (Table 1). This DAU has historically met criteria for moderate harvest, but was targeted for heavy harvest in the 1999-2010 bear plan. Harvest criteria indicate this population remains under moderate (% females) to light (% males 5+) harvest.

Management Direction

To test the validity of the black bear harvest indicators, DAU 1C will be managed to maintain the heavy harvest targets of <25% age 5+ black bears in the male harvest and >40% females in the total harvest.

Background

DAU 1C consists mainly of USFS property and a belt of private property in Silver Valley. Much of this DAU was burned by wildfires during the early 1900s. It is a popular hunting area for Coeur d'Alene and Silver Valley big game hunters. Road densities are moderate to very high.

Special Projects

Department Research Biologist John Beecham studied black bears in the central portion of the Coeur d'Alene Mountains 1978 and 1983. Additional work was conducted in GMU 1 (DAU 1A) and 6 (DAU 1L). The primary focuses of this work were basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August, yielding 99 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994).

During 1999, regional personnel re-trapped Beecham's study area (80 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data). Two additional studies were also conducted centered on this same study area.

A graduate project was conducted 2006-2008, utilizing GPS collars to examine habitat use of black bears relative to road densities characteristics and other habitat disturbances (IDFG unpublished data). Locations were obtained at 20-minute intervals for 10-25 collars each year. An effort was undertaken during 2008 to help assess the efficacy of DNA sampling to detect the radio-collared bears (IDFG unpublished data). During this study, 163 bears were identified, of

which 11 were GPS-collared. Including live trapping and DNA sampling, 191 bears (108 female, 83 male) were identified using the study area during summer 2008.

Harvest Characteristics

About a third of the harvest in this DAU occurs in the spring. The primary method used to kill bears in DAU 1C during 2009 was still/stalking (38%), followed closely by the use of hounds (21%) and bait (21%). Incidental harvest accounted for 10% of the 2009 harvest. Eighty-six percent of the black bears harvested in DAU 1B were taken with a rifle (Table 3).

Sex Ratio/Age Structure

The percentage of females in the 2007-2009 harvest was 37%, lower than the 40%+ objective. The percentage of males 5+ years old was 37%, well above the desired age criterion of <25%. There were only two years since 1995 (1996, 1997) in which this criterion was met.

Dog-training Seasons

The 2009 dog-training season in DAU 1C was 1 June-31 July (Appendix A).

Management Implications

Hunting seasons were altered twice since the 1999-2010 black bear plan was initiated, in an attempt to change the population composition with more liberal seasons. During 2000, the fall hunting season was opened 30 August rather than 15 September as it was during 1999. During 2004, two weeks were added to the spring season, closing 31 May rather than 15 May. No response has been seen in management indicators. Management indicators have changed little since 1994.

DAU 1L (GMU 6)

Abstract

Harvest of black bears in DAU 1L averaged 71 in 2009, down 13% from the 2006-2008 average. Thirty-eight percent of the harvest occurred during spring (Table 1). Females made up 34% of the 3-year harvest average and are within the objectives established for this DAU. The 3-year average for the percentage of males ≥5 years was 28%, and was within the management objectives for this DAU.

Management Direction

DAU 1L will be managed to maintain the moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Harvest criteria falls within the desired category for both females and males. Because of the relatively small harvest in this DAU, there is significant fluctuation in the management criteria from year to year. Baiting has been allowed within this DAU since 2000.

Background

This DAU is a mix of private property, mainly timber company lands, with a mix of USFS, Bureau of Land Management (BLM), and Idaho Department of Lands (IDL) property. This area has been influenced heavily by logging and, to a lesser extent, by the large fires of the early 1900s. Road densities range from moderate to high.

Recent season changes include the addition of bait and a 30 August opener instead of a 15 September opener (both during 2000), and a two week addition to spring hunting during 2004 (closing 31 May rather than 15 May).

Special Projects

Department Research Biologist John Beecham studied black bears in the Marble Creek drainage of the St. Joe Mountains during 1982. Additional work was conducted in GMU 4 (DAU 1A) during 1978 and 1983, and in GMU 4 (DAU 1C). The primary focuses of this work were basic bear ecology and developing bear management techniques. Trapping was conducted early June through mid-August, yielding 25 captures. This information is contained in annual Pittman-Robertson reports, and is summarized in Beecham and Rohlman (1994).

During 2000, regional personnel re-trapped Beecham's study area (39 captures) to compare catch per unit effort and age/sex composition of trapped bears (IDFG unpublished data).

Harvest Characteristics

The 2009 harvest of 71 bears is 13% below the previous 3-year average of 82. Thirty-eight percent of the harvest occurred during spring. Spotting/stalking is the primary method used to hunt bears in this DAU, with 41% of the 2009 harvest taken in this manner (Table 2). Use of hounds and bears taken incidental to other hunting were also important. Baiting has been allowed since fall 2000, with 23% of the 2009 harvest, an increasing trend. Nearly all black bears taken in this DAU are taken with a rifle (Table 3).

Sex Ratio/Age Structure

Thirty-four percent of the 2007-2009 harvest was female bears, reflective of a moderate harvest regime. The percentage of males ≥5 years was 28%, also indicative of moderate harvest.

Dog-training Seasons

The 2009 dog-training season in this DAU was 1 June-31 July (Appendix A).

Management Implications

The percentage of females harvested is within the moderate harvest level prescribed for this DAU as well as the percentage of male harvest reaching 5 years-of-age (Table 5).

AREA 2

DAU 2B (GMUs 7, 9)

Abstract

Harvest of black bears in DAU 2B was 47 bears during 2009, 13% below the 2006-2008 average. Spring harvest is predominant in this DAU (77% of the 2009 harvest). This DAU is targeted for moderate harvest. The percentage of females in the harvest is currently in the lightly-harvested category, as is the average male age structure criterion.

Management Direction

DAU 2B will be managed to increase harvest to the moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Seasons have been increased in this DAU. Few changes are anticipated in harvest levels because of the remote nature of this DAU; however, criteria will be monitored to see if significant changes do occur as a result of these changes.

Background

This DAU is the most remote from human population centers of any DAU in Panhandle Region. In addition, persistent snowdrifts make spring travel difficult, and substantial roadless areas preclude high levels of use. Most of the habitat in this DAU is managed by USFS.

DAU 2B has historically met criteria for a lightly harvested population. In the current Black Bear Plan, the Department targeted a moderate harvest objective to allow for additional hunting opportunities.

Harvest Characteristics

The 2009 harvest of 47 bears, while lower than the 2006-2008 average by 13%, was within the range typically seen during the past 10 years (Table 1). Seventy-seven percent of the 2009 bear harvest in this DAU took place during spring, a pattern similar to that of prior years (Table 1).

Fifty-seven percent of the 2009 harvest was taken with the use of bait, the highest percentage in Panhandle Region. Of the remaining harvest, 22% was taken incidentally to other types of hunting and 19% of the harvest was still/stalk hunting. Unlike previous years, no hound harvest was recorded (Table 2).

Most of the black bears harvested in this DAU are taken with a rifle (66%), but the archery harvest now makes up a significant portion of the harvest (26%) (Table 3).

Sex Ratio/Age Structure

The percentage of females in the 2007-2009 harvest was 28%, slightly below the objective of 30-40%. Males $\geq$ 5+ made up 44% of the harvest, above the objective of 25-35%. This DAU is slated for moderate harvest but harvest indicators are in the light category.

Dog-training Seasons

The 2009 dog-training season in this DAU was 1-31 July (Appendix A).

Management Implications

The proportion of females and adult males in the harvest indicates that this population is lightly harvested.

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Table 1. Black bear harvest by season and sex, Panhandle Region, 1994-present.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
1A												
1994	81	21	1	103	51	35	1	87	132	56	2	190
1995	65	27	0	92	44	22	1	67	109	49	1	159
1996	102	49	0	151	41	28	1	70	143	77	1	221
1997	64	26	0	90	82	60	1	143	146	86	1	233
1998	75	29	0	104	140	69	1	210	215	98	1	314
1999	76	37	0	113	40	28	2	70	116	65	2	183
2000	70	30	0	100	44	16	1	61	114	46	1	161
2001	57	12	1	70	35	22	1	58	92	34	2	128
2002	53	26	0	79	68	34	1	103	121	60	1	182
2003	76	43	1	120	76	37	1	114	152	80	2	234
2004	79	39	1	119	51	29	0	80	130	68	1	199
2005	69	26	1	96	39	32	1	72	108	58	2	168
2006	63	21	0	84	83	55	0	139	146	76	1	223
2007	78	20	0	98	60	50	1	111	138	70	1	209
2008	47	22	1	70	46	26	1	73	93	48	2	143
2009	49	24	0	73	41	19	0	60	90	43	0	133
3-yr. avg.	**58**	**22**	**0**	**80**	**49**	**32**	**1**	**81**	**107**	**54**	**1**	**162**
1B												
1994	22	14	0	36	28	25	0	53	50	39	0	89
1995	34	5	3	42	25	18	0	43	59	23	3	85
1996	32	14	0	46	35	26	2	63	67	40	2	109
1997	18	14	1	33	47	31	1	79	65	45	2	112
1998	30	19	0	49	69	57	1	127	99	76	1	176
1999	26	12	0	38	40	33	0	73	66	45	0	111
2000	24	16	0	40	37	27	0	64	61	43	0	104
2001	14	11	0	25	45	35	0	80	59	46	0	105
2002	14	17	0	31	49	37	1	87	63	54	1	118
2003	22	14	0	36	56	54	0	110	78	68	0	146
2004	27	19	0	46	37	33	0	70	64	52	0	116
2005	35	13	0	48	43	41	0	84	78	54	0	132
2006	21	14	0	35	45	44	0	89	66	58	0	124
2007	23	13	0	36	66	49	0	115	89	62	0	151
2008	8	4	0	12	64	50	0	114	72	54	0	126
2009	18	10	1	29	63	40	1	104	81	50	2	133
3-yr. avg.	**16**	**9**	**0**	**26**	**64**	**46**	**0**	**111**	**81**	**55**	**0**	**137**
1C												
1994	30	5	0	35	24	11	0	35	54	16	0	70
1995	23	15	0	38	33	13	0	46	56	28	0	84
1996	13	4	0	17	41	27	0	68	54	31	0	85

Table 1. Continued.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
1997	17	3	0	20	50	39	1	90	67	42	1	110
1998	40	14	0	54	56	33	0	89	96	47	0	143
1999	23	20	1	44	56	33	0	89	79	53	1	133
2000	21	7	0	28	41	26	0	67	62	33	0	95
2001	24	5	0	29	47	24	0	71	71	29	0	100
2002	22	5	0	27	95	36	2	133	117	41	2	160
2003	36	13	0	49	65	44	0	109	101	57	0	158
2004	46	13	0	59	50	26	1	77	95	39	1	135
2005	70	33	1	104	57	38	1	96	127	71	2	200
2006	40	16	0	56	64	30	0	94	104	46	0	150
2007	52	24	1	77	51	39	0	90	103	63	1	167
2008	17	11	0	12	46	33	0	12	72	54	0	126
2009	37	8	1	46	56	33	0	89	93	41	1	135
3-yr. avg.	**35**	**14**	**1**	**45**	**51**	**35**	**0**	**64**	**89**	**53**	**1**	**143**
1L												
1994	15	5	0	20	19	11	0	30	34	16	0	50
1995	18	7	0	25	28	10	0	38	46	17	0	63
1996	19	6	0	25	19	18	0	37	38	24	0	62
1997	14	9	0	23	29	27	0	56	43	36	0	79
1998	23	4	0	27	34	16	0	50	57	20	0	77
1999	25	16	0	41	27	16	0	43	52	32	0	84
2000	13	6	0	19	18	13	0	31	31	19	0	50
2001	17	4	0	21	28	17	0	45	45	21	0	66
2002	25	11	0	36	65	35	1	101	90	46	1	137
2003	22	9	0	31	38	24	0	62	60	33	0	93
2004	21	9	0	30	26	22	0	48	47	31	0	78
2005	40	16	0	56	33	30	0	63	73	46	0	119
2006	25	11	0	36	34	18	0	52	59	29	0	88
2007	27	11	0	38	35	23	0	58	62	34	0	96
2008	14	4	0	18	27	17	0	44	41	21	0	62
2009	24	6	0	30	25	15	1	41	49	21	1	71
3-yr. avg.	**39**	**7**	**0**	**29**	**29**	**15**	**0**	**48**	**51**	**25**	**0**	**76**
2B												
1994	16	9	0	25	6	6	0	12	22	15	0	37
1995	17	8	0	25	12	2	0	14	29	10	0	39
1996	41	6	0	47	4	6	0	10	45	12	0	57
1997	25	5	0	30	8	6	0	14	33	11	0	44
1998	38	12	0	50	16	8	0	24	54	20	0	74
1999	28	14	0	42	10	9	0	19	38	23	0	61
2000	33	10	0	43	7	1	0	8	40	11	0	51
2001	26	17	0	43	6	3	11	20	32	20	11	63

Table 1. Continued.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
2002	35	9	0	44	12	5	0	17	47	14	0	61
2003	29	19	0	48	11	6	0	17	40	25	0	65
2004	34	11	0	45	7	4	0	11	41	15	0	56
2005	34	13	0	47	8	3	0	11	42	16	0	58
2006	31	11	0	42	9	3	0	12	40	14	0	54
2007	39	12	0	51	7	2	0	9	46	14	0	60
2008	27	11	0	12	5	5	0	12	72	54	0	12
2009	25	5	0	30	14	3	0	17	39	8	0	47
3-yr. avg.	**30**	**9**	**0**	**31**	**9**	**3**	**0**	**13**	**52**	**25**	**0**	**40**

Table 2. Method of black bear harvest, Panhandle Region, 1995-present.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
1A						
1995	0	0	61	17	82	160
1996	0	4	183	29	5	221
1997	1	1	135	81	15	233
1998	0	0	249	46	10	305
1999	0	4	145	28	6	183
2000	0	5	138	11	7	161
2001	0	7	99	6	5	117
2002	0	5	142	12	26	185
2003	1	3	191	17	25	237
2004	0	7	166	22	4	199
2005	0	3	144	14	7	168
2006	0	9	189	22	3	223
2007	0	2	181	16	10	209
2008	0	1	121	15	6	143
2009	1	3	117	9	3	133
1B						
1995	16	15	26	11	28	96
1996	22	24	45	13	3	107
1997	20	23	37	35	4	119
1998	47	42	75	42	8	214
1999	25	28	41	19	1	114
2000	24	22	47	11	3	107
2001	29	20	28	10	2	89
2002	28	24	40	17	9	118
2003	44	34	39	23	6	146
2004	42	26	37	9	2	116
2005	45	22	48	12	7	134
2006	44	20	35	20	5	124
2007	52	21	48	27	3	151
2008	40	24	35	21	6	126
2009	52	30	35	10	6	133
1C						
1995	6	12	18	21	27	84
1996	6	17	33	24	4	84
1997	9	3	54	42	3	111
1998	21	20	61	39	2	143
1999	13	33	46	37	3	132
2000	11	27	41	14	2	95
2001	11	31	41	12	0	95
2002	24	23	73	30	10	160

Table 2. Continued.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
2003	21	30	60	41	6	158
2004	30	30	37	37	2	136
2005	54	26	86	30	4	200
2006	45	27	47	29	2	150
2007	46	26	56	34	5	167
2008	25	16	36	29	0	106
2009	28	29	51	14	13	135
1L						
1995	0	10	19	18	16	63
1996	0	10	26	26	0	62
1997	0	11	37	27	5	80
1998	0	23	45	28	1	97
1999	0	21	41	22	0	84
2000	1	14	20	15	1	51
2001	4	12	25	21	0	62
2002	17	26	44	47	3	137
2003	13	21	33	24	2	93
2004	6	16	40	14	2	78
2005	25	21	57	14	2	119
2006	11	19	40	16	2	88
2007	18	18	36	24	0	96
2008	10	9	27	16	0	62
2009	16	14	29	8	4	71
2B						
1995	1	1	5	11	21	39
1996	29	2	13	12	1	57
1997	20	3	6	12	4	45
1998	19	5	24	24	0	72
1999	16	12	15	18	0	61
2000	24	7	10	9	1	51
2001	26	5	15	6	0	52
2002	26	11	18	4	2	61
2003	25	6	18	13	3	65
2004	26	12	14	4	0	56
2005	33	7	7	7	4	58
2006	35	5	7	5	2	54
2007	43	3	9	5	0	60
2008	35	0	4	7	1	47
2009	27	0	9	10	1	47

Table 3. Weapon type used to harvest black bear, Panhandle Region, 1995-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1A						
1995	149	4	1	3	3	160
1996	213	2	1	4	1	221
1997	221	2	0	5	2	230
1998	291	9	0	6	78	384
1999	172	3	1	5	2	183
2000	155	2	1	3	0	161
2001	91	1	0	0	0	92
2002	175	8	1	1	0	185
2003	209	18	2	6	2	237
2004	189	8	1	1	0	199
2005	158	6	0	2	2	168
2006	191	25	1	1	5	223
2007	185	23	0	1	0	209
2008	130	10	0	1	2	143
2009	122	8	0	2	1	133
1B						
1995	72	13	3	8	1	97
1996	92	10	1	4	1	108
1997	101	9	2	2	5	119
1998	177	15	1	7	0	200
1999	96	12	1	4	1	114
2000	93	8	1	2	3	107
2001	79	18	0	5	4	106
2002	103	10	3	2	0	118
2003	118	19	2	3	4	146
2004	89	21	4	2	0	116
2005	110	16	0	5	1	132
2006	104	16	0	1	3	124
2007	116	27	1	6	1	151
2008	107	15	0	3	1	126
2009	107	20	1	5	6	133
1C						
1995	74	6	1	1	2	84
1996	74	6	0	5	0	85
1997	102	4	1	1	2	110
1998	131	8	0	3	2	144
1999	121	4	0	5	2	132
2000	86	7	0	2	0	95
2001	90	8	1	1	1	101
2002	140	12	1	5	2	160

Table 3. Continued.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2003	142	10	1	1	4	158
2004	115	14	2	4	1	136
2005	171	23	1	3	2	200
2006	127	19	1	2	1	150
2007	126	30	1	2	1	167
2008	91	10	0	5	1	107
2009	116	16	0	3	0	135
1L						
1995	56	3	0	4	0	63
1996	59	2	0	1	0	62
1997	74	3	0	2	1	80
1998	92	4	0	2	1	99
1999	80	2	0	2	0	84
2000	47	2	0	0	2	51
2001	54	1	1	0	2	58
2002	122	11	1	2	1	137
2003	85	4	0	4	0	93
2004	74	3	0	1	0	78
2005	109	6	2	1	1	119
2006	83	4	0	1	0	88
2007	89	6	0	1	0	96
2008	57	3	1	1	0	62
2009	61	7	1	2	0	71
2B						
1995	32	5	1	1	0	39
1996	49	8	0	0	0	57
1997	38	6	0	1	0	45
1998	58	10	2	2	2	74
1999	54	3	2	2	0	61
2000	39	6	2	2	2	51
2001	47	3	1	2	0	53
2002	49	6	1	0	5	61
2003	52	7	3	3	0	65
2004	45	9	2	0	0	56
2005	48	5	2	2	1	58
2006	42	10	1	1	0	54
2007	45	11	3	0	1	60
2008	41	6	1	0	0	48
2009	31	12	0	3	1	47

Table 4. Age distribution of black bear, Panhandle Region, 1995-present.

DAU		Age[a]										
Year	Sex	1	2	3	4	5	6	7	8	9	10+	Total
1A												
1995	M	11	16	26	5	8	5	10	1	1	15	98
	F	3	3	9	8	5	4	2	3	1	7	45
1996	M	9	34	25	14	18	10	6	10	1	11	138
	F	3	14	7	12	4	5	5	5	1	21	77
1997	M	18	27	26	16	15	7	7	3	7	11	137
	F	8	10	22	3	8	5	4	5	0	15	80
1998	M	1	10	4	10	3	3	1	3	2	11	48
	F	0	1	3	4	0	0	5	0	1	6	20
1999	M	8	13	17	13	15	3	6	7	7	12	101
	F	6	3	7	4	4	0	2	4	2	23	55
2000	M	5	9	13	22	8	9	7	6	4	7	90
	F	0	3	3	4	3	6	1	3	1	14	38
2001	M	13	3	7	4	11	3	14	3	5	8	71
	F	3	2	3	2	1	1	3	0	3	11	29
2002	M	9	39	7	6	4	9	3	7	5	9	98
	F	2	8	1	3	7	6	4	3	3	14	51
2003	M	19	24	34	3	6	6	7	4	8	21	132
	F	4	10	18	2	3	2	9	8	4	9	69
2004	M	7	20	19	24	4	2	2	7	4	27	116
	F	1	7	5	13	2	1	0	7	3	26	65
2005	M	7	16	17	13	10	0	2	5	7	12	89
	F	3	4	11	6	7	0	1	0	3	11	46
2006	M	22	15	14	24	14	15	0	0	0	15	119
	F	8	4	5	8	5	7	2	3	0	18	60
2007	M	15	17	13	11	16	9	12	3	2	20	118
	F	12	9	5	6	8	5	7	0	2	11	65
2008	M	7	18	15	7	3	9	4	8	0	21	92
	F	3	7	6	2	1	3	1	4	1	16	44
2009	M	11	11	18	17	4	1	5	4	7	7	85
	F	1	6	6	4	2	4	1	1	4	8	37
1B												
1995	M	9	10	13	8	4	1	1	2	1	5	54
	F	3	2	2	3	2	0	1	2	0	7	22
1996	M	6	17	6	14	2	5	1	3	0	5	59
	F	2	4	7	5	0	5	2	4	2	8	39
1997	M	18	10	16	7	7	2	2	1	2	1	66
	F	6	6	12	2	2	1	4	3	0	8	44
1998	M	0	6	0	10	2	2	1	1	1	4	27
	F	1	3	1	6	0	3	0	1	0	7	22
1999	M	8	10	23	3	9	2	3	3	1	1	63
	F	3	2	10	5	3	4	4	0	1	9	41
2000	M	4	13	10	10	2	4	0	1	1	0	45

Table 4. Continued.

DAU		Age[a]										
Year	Sex	1	2	3	4	5	6	7	8	9	10+	Total
	F	1	3	4	3	4	4	2	2	1	10	34
2001	M	14	9	13	6	7	1	3	1	1	1	56
	F	6	6	7	4	4	1	2	2	5	8	45
2002	M	14	23	9	4	0	6	1	2	0	3	62
	F	6	11	6	8	3	2	1	5	1	9	52
2003	M	14	16	20	7	6	4	4	1	1	2	75
	F	5	15	11	2	7	5	4	4	1	11	65
2004	M	9	16	18	13	2	2	1	2	0	1	64
	F	6	10	9	4	2	0	1	0	4	11	47
2005	M	12	16	20	12	6	1	2	0	0	1	70
	F	5	14	8	6	2	1	7	1	1	7	52
2006	M	13	16	16	8	4	1	2	1	1	2	64
	F	7	7	7	5	2	3	1	7	3	9	52
2007	M	22	21	10	13	6	3	2	4	2	4	87
	F	5	17	7	5	5	4	3	3	1	10	60
2008	M	22	16	11	10	2	1	0	2	2	3	69
	F	1	4	12	5	4	3	2	3	1	18	53
2009	M	13	27	15	8	3	1	3	2	1	2	75
	F	6	11	6	7	3	1	2	2	1	8	47
1C												
1995	M	11	10	8	3	7	1	3	0	0	5	48
	F	3	3	4	2	3	2	1	0	1	4	23
1996	M	11	18	9	10	1	1	1	1	0	2	54
	F	4	6	5	6	2	0	3	2	0	1	29
1997	M	20	10	18	3	3	0	3	1	0	4	62
	F	10	4	6	3	4	0	2	1	2	6	38
1998	M	0	3	3	9	0	3	0	3	1	3	25
	F	1	0	0	2	2	0	1	0	0	0	6
1999	M	6	17	16	6	11	2	7	3	2	5	75
	F	2	5	8	2	8	3	3	0	7	4	42
2000	M	4	6	9	8	4	3	4	2	2	7	49
	F	0	3	5	1	1	2	0	2	5	6	25
2001	M	18	8	9	5	8	2	6	0	2	8	66
	F	4	2	2	1	4	0	3	1	0	10	27
2002	M	14	41	2	3	6	10	3	10	5	13	107
	F	4	5	4	2	5	8	1	1	2	8	40
2003	M	15	15	28	1	5	3	5	1	4	12	89
	F	4	8	15	4	2	0	3	0	3	10	49
2004	M	10	20	20	17	4	2	3	7	3	6	92
	F	1	3	5	8	0	2	2	2	3	10	36
2005	M	11	22	37	12	19	1	1	2	3	11	119
	F	7	11	9	5	12	1	4	1	4	13	67
2006	M	13	21	7	21	10	10	2	0	3	7	94
	F	5	5	4	5	3	3	1	1	1	7	35
2007	M	10	14	24	4	16	6	9	1	1	14	99

Table 4. Continued.

DAU		Age[a]										
Year	Sex	1	2	3	4	5	6	7	8	9	10+	Total
	F	5	5	9	8	11	2	7	0	0	14	61
2008	M	6	16	9	8	4	6	2	3	1	3	58
	F	7	7	6	2	1	2	1	4	0	12	42
1L												
1995	M	8	7	5	4	4	0	0	1	0	6	35
	F	3	1	2	0	0	0	0	1	0	5	12
1996	M	2	11	2	3	2	5	2	2	0	4	33
	F	1	5	3	2	0	0	1	2	0	7	21
1997	M	12	6	9	5	3	2	1	0	0	3	41
	F	6	4	6	1	3	1	4	1	1	5	32
1998	M	0	5	3	6	0	4	0	1	0	3	22
	F	0	1	1	3	0	1	0	0	0	0	6
1999	M	0	7	15	4	8	2	3	1	3	6	49
	F	0	2	9	1	5	0	4	1	1	7	30
2000	M	0	6	1	7	4	5	1	2	0	3	29
	F	1	3	2	4	0	1	0	1	0	2	14
2001	M	8	4	5	4	5	3	6	2	1	3	41
	F	1	3	3	1	2	1	2	1	0	6	20
2002	M	9	30	3	12	2	9	1	6	4	3	79
	F	5	11	4	3	4	4	1	5	1	6	44
2003	M	11	14	15	3	2	2	4	2	3	3	59
	F	4	5	5	2	3	1	5	2	0	6	33
2004	M	8	11	5	7	4	2	3	1	1	5	47
	F	2	4	3	6	1	4	2	3	0	4	29
2005	M	10	12	20	6	8	1	2	1	2	9	71
	F	3	6	8	5	7	1	1	1	1	10	43
2006	M	10	12	7	9	4	5	0	1	0	5	53
	F	1	6	0	3	5	4	0	2	0	5	26
2007	M	11	17	10	5	4	3	5	0	2	2	59
	F	2	4	6	6	4	2	4		2	3	33
2008	M	6	11	8	3	3	3	1	1	0	1	37
	F	1	4	1	5	2	2	1	0	0	3	19
2009	M	8	11	9	3	8	1	1		3	5	49
	F	1	5	3		2	3	2		1	4	21
2B												
1995	M	4	4	7	2	2	0	6	0	0	1	26
	F	0	2	3	2	0	0	0	0	1	2	10
1996	M	0	12	2	9	7	1	3	6	0	4	44
	F	0	4	1	4	0	0	1	1	1	0	12
1997	M	5	6	10	2	2	1	2	0	0	3	31
	F	1	0	1	2	1	0	0	0	0	2	7
1998	M	0	5	7	4	1	2	5	2	0	2	28
	F	0	0	2	2	1	2	1	0	0	0	8
1999	M	1	0	9	7	3	5	1	1	3	5	35
	F	0	0	3	3	4	1	0	1	2	5	19

Table 4. Continued.

DAU		Age[a]										
Year	Sex	1	2	3	4	5	6	7	8	9	10+	Total
2000	M	0	2	6	8	4	6	3	3	1	5	38
	F	0	0	2	5	0	1	0	1	0	2	11
2001	M	2	1	4	3	3	1	7	2	2	6	31
	F	0	2	2	1	2	0	2	0	1	4	14
2002	M	4	14	2	3	3	4	2	6	2	3	43
	F	2	1	0	1	1	2	2	3	0	1	13
2003	M	2	2	18	0	2	0	4	2	0	8	38
	F	0	2	8	0	2	2	0	0	1	8	23
2004	M	2	10	6	10	0	1	2	3	0	6	40
	F	1	1	4	3	0	1	0	1	1	6	18
2005	M	3	6	7	8	7	2	2	0	2	4	41
	F	0	2	1	0	1	0	0	0	0	9	13
2006	M	3	7	6	6	5	9	0	1	0	3	40
	F	1	1	2	2	1	3	0	0	0	4	14
2007	M	1	9	13	4	5	5	6	0	0	4	47
	F	0	1	3	3	3	0	0	0	0	6	16
2008	M	0	4	6	8	2	4	0	3	0	10	37
	F	0	1	4	3	3	00	1	1	1	4	18
2009	M	1	5	11	5	5	2	2	2	1	1	35
	F	1	0	2	0	1	1	0	0	2	1	8

[a] Includes only black bear with both known age and sex.

Table 5. 2000-2010 Black Bear Plan management indicators, 1995-present.

DAU Year	*n*	% Females	% Males ≥5	# Males ≥5
1A				
1995	164	32	42	44
1996	222	35	41	56
1997	232	37	36	50
1998	280	32	48	23
1999	181	36	50	50
2000	160	29	49	48
2001	126	27	63	45
2002	182	33	41	37
2003	234	34	39	52
2004	199	34	40	46
2005	168	35	40	36
2006	223	34	37	44
2007	209	34	56	62
2008	126	32	49	45
2009	133	32	33	28
3-year avg.	**156**	**33**	**43**	**45**
Desired levels		**<30**	**>35**	
1B				
1995	97	29	23	15
1996	114	37	27	16
1997	117	40	23	15
1998	179	43	41	11
1999	114	39	29	19
2000	107	41	18	8
2001	106	43	25	14
2002	119	46	19	12
2003	147	46	24	18
2004	117	44	13	8
2005	132	41	14	10
2006	124	47	17	11
2007	151	41	24	21
2008	126	43	14	10
2009	131	38	16	12
3-year avg.	**136**	**41**	**18**	**14**
Desired levels		**>40**	**<25**	
1C				
1995	84	33	29	16
1996	89	36	11	6
1997	109	39	18	11
1998	128	29	40	10

Table 5 Continued

DAU Year	*n*	% Females	% Males ≥5	# Males ≥5
1999	131	35	40	30
2000	95	35	45	22
2001	100	29	39	26
2002	158	26	44	47
2003	152	36	34	30
2004	135	29	27	25
2005	200	26	31	37
2006	150	31	34	32
2007	167	38	47	47
2008	126	43	33	19
2009	135	30	38	34
3-year avg.	**143**	**37**	**37**	**33**
Desired levels		**>40**	**<25**	
1L				
1995	63	27	27	11
1996	62	40	45	15
1997	81	44	22	9
1998	78	27	36	8
1999	84	38	46	23
2000	51	39	52	15
2001	66	32	49	20
2002	138	33	31	25
2003	93	35	27	16
2004	80	32	33	16
2005	119	39	33	16
2006	88	33	28	15
2007	97	36	27	16
2008	62	34	24	9
2009	71	30	37	18
3-year avg.	**77**	**34**	**28**	**14**
Desired levels		**30-40**	**25-35**	
2B				
1995	39	26	38	11
1996	56	21	48	21
1997	44	25	26	8
1998	62	26	43	12
1999	61	38	51	18
2000	51	22	58	22
2001	52	38	68	21
2002	61	23	49	20
2003	63	37	42	16
2004	56	15	30	12
2005	58	28	41	17

Table 5 Continued

DAU Year	*n*	% Females	% Males ≥5	# Males ≥5
2006	54	26	45	18
2007	60	23	43	20
2008	12	43	51	19
2009	47	17	37	13
3-year avg.	**52**	**28**	**44**	**16**
Desired levels		**30-40**	**25-35**	

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	2	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

CLEARWATER REGION

Abstract

Reported 2009 harvest for Clearwater Region black bears was 750 animals. This compares to 730 and 818 bears harvested in 2008 and 2007, respectively. This total is slightly below the previous 3-year average of 766. Total harvest by DAU in 2009 was 121 in DAU 1D, 78 in DAU 1E, 159 in DAU 1F, 250 in DAU 2A, and 142 in DAU 3A.

All Black Bear Management Plan harvest criteria for the 2000-2010 Plan were met in DAUs 1D, 2A, and 3A. The criterion for percent females in the harvest was again exceeded slightly in DAUs 1E and 1F (by 5% and 1%, respectively).

Concerns over elk calf recruitment rates in DAUs 2A and 3A led to liberalized season frameworks beginning in 1998 (2-bear bag limit, extended season length, implementation of an outfitter-overlap program, reduced price nonresident tag fees, etc.). Harvest increased markedly in these DAUs. However, harvest criteria indicate that populations are still lightly harvested. Unlike other regional DAUs, harvest in 2A and 3A occurs primarily during the spring season (82% in DAU 2A and 71% in DAU 3A based on a 3-year average) and with hunting over bait being the predominant method of take (72% and 61%, respectively) based on 2009 data. For the rest of the region (DAU's 1D, 1E, and 1F), spring harvest accounted for 38%, 45%, and 34% of the total harvest, respectively, based on a 3-year average. The most common method of take in DAU 1D was hounds (40%) followed by incidental (32%), while the most common method of take for DAU 1E was still/stalk (32%) followed by incidental (28%). For DAU 1F the most common method of take was baiting (38%), followed by still/stalk (23%).

No bait station surveys have been conducted in the Clearwater region since 2007. This technique has been largely abandoned on a statewide basis due to concerns over its ability to accurately monitor population trends.

AREA 1

DAU 1D (GMUs 8A, 10A)

Abstract

DAU 1D had historically been one of the most over-harvested DAUs in the region. Harvest criteria were exceeded in all 4 over-harvest criteria in 1992. In 1993, seasons were modified to reduce harvest of black bears in this DAU. The regulation changes were successful in reducing harvest by an average of 16% over the following 3 years. However, since 1996, harvest has increased to levels higher than those observed prior to the regulation change. When analyzed by season and method, most of the 2009 harvest occurred in the fall (62%) by hound hunters (40%), incidental harvest (32%), and still/stalk hunters (26%); compared to 2008 when fall harvest accounted for 73% of the total harvest by hound hunters (47%), incidental harvest (35%), and still/stalk hunters (16%). High road densities have allowed hunters to access most of the available black bear habitat. The current 2000-2010 Black Bear Management Plan specifies that DAU 1D is to be managed for harvest at the "moderate" level. Harvest criteria fall within these levels.

Management Direction

DAU 1D has historically exhibited signs of high black bear harvest. This DAU likely receives many dispersers from DAU 2A; therefore, the current high harvest can probably be maintained. Direction for DAU 1D is to monitor harvest data to determine if changes in harvest structure reflect a negative trend in the population or just a change in age of black bears being shot by hunters as a result of fall harvest and food availability. The population will be stabilized through regulation changes if necessary.

Background

DAU 1D typically receives high annual rainfall, as indicated by the common occurrence of western red cedar habitat types, lush forb associations, and a variety of berry species. Productive habitat provides optimal foraging for black bears.

Mixed land ownership and high road densities on USFS, IDL, a private timber company, and small private landholdings characterize these GMUs. Although the habitat provides high-quality forage, easy hunter access has led to over-harvest problems from direct mortality as a result of intensive hunting pressure.

Historically, season lengths in DAU 1D were relatively long, but have been more restrictive in recent years. The 1992 season length was 107 days with a 2-week pursuit season. The fall season length under the 1992-2000 Black Bear Management Plan was reduced to 63 days with a 61-day pursuit season. The spring general season is 47 days. No changes in this DAU were included in the 2000-2010 Black Bear Plan. But in 2000, the fall season was extended 2 weeks earlier for archery hunters. For 2009, the general spring and fall season was 47 and 63 days, respectively. Black bear baiting is not allowed.

Population Surveys

Bait station surveys have not been conducted in DAU 1D since 1996 (Table 1). This technique has been largely abandoned on a statewide basis due to concerns about its ability to accurately monitor population trends.

Harvest Characteristics

During 2009, 121 black bears were harvested in DAU 1D. This total represents a 19% decrease when compared to the 150 black bears harvested in 2008 and a 14% decrease compared to the previous 3-year average of 141 black bears (Table 2). Females accounted for 42% of the harvest in 2009 (Table 3). Most black bears (64%) were harvested during the fall season. This is consistent with recent harvest trends, but a reversal from 1990-1992 (prior to changes designed to reduce harvest) when spring harvest predominated. Age characteristics of bears harvested from 2007-2009 indicate that criteria were met, however for the 2009 season the percent males ≥5 (18%), did not meet the desired level of ≥20% and the percent females harvested (42%), did not meet the desire level of ≤40% (Table 4).

The predominant method of harvest in 2009 was hound hunting, which accounted for 40% of the total harvest, followed by incidental harvest at 32% and still-hunting at 26% (Table 5). This represents a shift from 1990-1992, when baiting was the most common method used. The rifle was used to harvest 84% of black bears followed by archery at 7% (Table 6).

Depredations

No black bear depredations were reported in DAU 1D in 2009 (Table 7).

Dog-training Seasons

An 8-week dog-training season (from 1 June-31 July) was offered in DAU 1D during 2009 (Appendix A).

Management Implications

Based on current management criteria, black bears have been harvested at a moderate level in DAU 1D, the percent females (42%) exceeded the objective of ≤40% for the 2009 season. Under guidance of the previous (1992-2000) Black Bear Management Plan, black bear harvest in DAU 1D was reduced after the season framework was modified. However, harvest has rebounded to pre-1993 levels and beyond since that time.

Recent harvest records indicate an increased harvest of predominantly younger age-class black bears. This could be indicative of increased numbers of subadult dispersers dominating the harvest.

DAU 1E (GMUs 8, 11, 11A, 13)

Abstract

Hunters in DAU 1E harvested a total of 78 black bears during 2009, compared to 73 black bears harvested during 2008, and a 3-year average of 71. Females accounted for 42% of the harvest. Most black bears were harvested in the fall (56%) with still-hunting being the most common method employed (32%).

Management Direction

Because most of the black bear habitat in DAU 1E is privately owned and in steep canyons, harvest is not distributed evenly. Hound hunting is difficult and may conflict with private landowners due to fragmented ownership. Consequently, management direction is to reduce hound-hunting activity during take and dog-training seasons, but to maintain harvest levels. In addition, there is a lack of evenly dispersed, quality black bear habitat leading to the potential for over-harvest in portions of these isolated and/or fragmented habitats.

Background

DAU 1E is located in the western portion of Clearwater Region and is predominantly private land. Difficult access and fragmented black bear habitat through most of the DAU have kept overall harvest unevenly distributed. Agricultural crops and sheep and cattle allotments are plentiful and characterize this DAU. Timbered habitat is clumped and interspersed with expansive grasslands along the Salmon, Snake, and lower Clearwater River breaks. Old homesteads and dispersed fruit trees provide black bears with plentiful fall foods in some areas. Some of the largest black bears in the region are typically harvested in these GMUs. Past bait station transects conducted on Craig Mountain Wildlife Management Area (WMA) indicated an increasing trend in black bear visitation since the WMA came under Department management, and is concurrent with increasing harvest rates.

The climate in this DAU ranges from hot and arid along the river breaks, to cooler and moister at the higher elevations. The 2009 fall season length was 63 days (Appendix A), a reduction of 44 days from 1992. Spring general season in 2009 was 31 days.

Population Surveys

Bait station surveys were last conducted in 2007 for DAU 1E in GMU 11. Sixteen transects were sampled in June and July 2007. A 20% visitation rate was observed (Table 1) which was a 55% decrease over that observed in 2006 (44%) and was 38% lower than the previous 3-year average of 32%. Bait station surveys were discontinued in 2008.

Harvest Characteristics

There were 78 black bears harvested in DAU 1E during 2009. This compares to a previous 3-year average of 71 bears harvested. Forty-four percent and 56% were taken in the spring and

fall, respectively (Table 2). Harvest criteria were within the moderate range, as prescribed in plan goals (Table 4). The criterion for percent females in the harvest was exceeded in DAU 1E by 5%. The most frequent method of harvest was still-hunting, accounting for 32% of the harvest (Table 5). Weapon type most frequently used was the rifle which accounted for 95% of the harvest (Table 6).

Depredations

Most of the land in this DAU is privately owned. Two depredation complaints were recorded during 2009 (Table 7).

Dog-training Seasons

No dog-training season has been offered in DAU 1E (Appendix A).

Management Implications

Much of the land in GMUs 8, 11, 11A, and 13 is either agricultural or river breaks, resulting in black bear habitats being isolated. Consequently, most harvest occurs along major road, river, and creek corridors at higher elevations. Many of the young black bears harvested are probably dispersing to new territories with adult black bears using better quality habitats away from roads. It is likely that without much road access, harvest will continue to reflect young dispersing black bears. The 3-year (2007-2009) harvest was 45% female and might indicate that the productive elements of the population (females) were usually selecting more isolated areas, thus reducing the likelihood of mortality. The majority of black bears in any cohort being harvested in this DAU historically are 1-, 2-, and 3-year-old dispersing males.

DAU 1F (GMUs 14, 15, 16, 18)

Abstract

Hunters in DAU 1F harvested a total of 159 black bears during 2009, compared to 142 in 2008, and a previous 3-year average of 150. More than half of the black bears (67%) harvested were taken during the fall, a change from pre-1993, when spring harvest predominated. The most frequent harvest methods were bait (38%), still/stalk hunting (23%), incidental (21%), and hounds (16%). The most frequent weapon types used were rifle (86%) and archery (11%). The 2007-2009 harvest criteria indicated that percent females (36%) in the harvest slightly exceeded the target criteria of ≤35%. The percent males ≥5 years old (30%), exceeded the target of ≥20%. A portion of the DAU in GMU 15 was closed to harvest for research purposes for several years, but reopened in 2004.

Management Direction

Prior to 1993, black bear harvest had increased in DAU 1F, probably as a result of increased road densities into previously roadless areas. The previous Black Bear Management Plan (1992-2000) adopted a decrease in season length, more restrictions on use of dogs during take seasons,

and the dog-training season was lengthened. The direction for management was to reduce black bear harvest, improve black bear population demographics, and maintain hunting opportunity with a variety of hunting techniques. The new black bear plan for 2000-2010 calls for maintaining moderate harvest levels. A portion of GMU 15 that was closed to bear harvest in 1999 due to research was reopened in 2004 to coincide with the season in the rest of the GMU.

Background

Under the 2000-2010 Black Bear Management Plan, season framework in DAU 1F is similar to that of the previous black bear plan. Under the 1992-2000 plan, fall general take season was shortened to 63 days with a dog-training season of 61 days in GMUs 14, 15, and 18 and 31 days for training in GMU 16. (Appendix A). Spring general season in 2009 was 47 days in GMUs 14, 15, and 18 and 77 days in GMU 16. Fall general season in DAU 1F was 63 days long for the 2009 season.

DAU 1F is comprised of about 80% USFS land and 20% private and state lands. Much of the area has high road densities, has been logged, and is easily accessible. There are a few areas in these GMUs that provide core security areas for black bears.

Population Surveys

Bait station surveys were most recently conducted during 2004 in conjunction with the elk productivity research study. Data were analyzed for trails and open and closed roads. In general, trails and closed roads received more visitations than did open roads. Sixty-five transects were surveyed in 2004, and 101 of 325 stations were visited by black bears, resulting in a 31% visitation rate (Table 1). Bait station surveys have not been conducted since 2004.

Harvest Characteristics

There were 159 black bears harvested in DAU 1F during 2009 with 67% being taken during the fall season (Table 2). Management objectives under the new plan allow moderate harvest of females with management criteria of ≤35% (Tables 3 and 4). The criterion for percent females in the 2007-2009 harvest was exceeded in DAU 1F by 1%. The most frequent methods of harvest were bait (38%), still/stalk hunting (23%), followed by incidental (21%), and hounds (16%) (Table 5). Rifle was the most frequent (86%) weapon type used to harvest a bear in 2009 (Table 6).

Depredations

One depredation complaint was recorded for this DAU in 2009 (Table 7).

Dog-training Seasons

Dog-training season ran from 1 June-31 July in DAU 1F, except for GMU 16 where the season ran from 1-31 July (Appendix A).

Management Implications

DAU 1F has historically received intensive hound hunting activity because of its proximity to population centers and easy road access. Most of the DAU is on national forest lands with high road densities. Although black bear harvest criteria indicate moderate to high harvest levels in recent years, the high-quality black bear habitat in this DAU should allow black bear populations to be maintained at desired levels in reserve and roadless areas. Currently, the harvest is fairly evenly distributed between bait, hounds, still, and incidental harvest for method of take. In recent years, harvest has increased to levels above what occurred prior to the regulation changes. The closure of the northern portion of GMU 15 had an impact on overall harvest. Harvest levels there have returned to, and exceeded, previous peak levels observed in 1998.

AREA 2

DAU 2A (GMUs 10, 12)

Abstract

In 2009, 250 black bears were harvested in DAU 2A, compared to 237 in 2008, and a previous 3-year average of 269. Thirty percent of the harvest consisted of females. Eighty-two percent of the total harvest occurred during the spring season. Baiting accounted for 72% of the harvest and rifle was the most common weapon used (73%).

Management Direction

The 2000-2010 Black Bear Management Plan recognizes DAU 2A as having productive habitat able to maintain high levels of harvest. DAU 2A may serve as a reservoir of black bears to surrounding GMUs receiving higher harvest pressures (e.g., GMU 10A). Harvest occurs mainly on major road and river corridors in DAU 2A. Take seasons last 157 days with a 31-day dog-training season (Appendix A). The bag limit was increased to 2 black bears per year to take advantage of high black bear numbers and enhance hunter opportunity as well as reduce the bear population within the elk productivity research study area boundaries.

Background

DAU 2A probably contains the most productive black bear habitat in Clearwater Region. High moisture, abundant berry producing shrubs, dense forests, and roadless areas allow for relatively high-density populations. However, liberal hunting seasons since the late 1970s have possibly kept black bear populations below achievable levels.

Population Surveys

Intensive bait station surveys were conducted between 1997 and 2007 (Table 1). Fifty-nine transects and 290 sites were sampled with a visitation rate of 20.7% in 2007. This hit rate represented a decrease of 8% from 2006 and was 22% lower than the previous 3-year average of 27.2. In general, sites on closed roads and trails received higher visitation rates than those on

open roads. Bait station surveys have not been conducted since 2007. This technique has been largely abandoned due to concerns over its ability to accurately monitor population trends.

Harvest Characteristics

In 2009, a total of 250 black bears were harvested in DAU 2A, compared to 237 in 2008, and a previous 3-year average of 269 bears harvested. Eighty-two percent of these black bears were harvested during spring season (Table 2). Thirty percent of all black bears harvested were females. Age criteria set under the new management plan allow for increased harvest as plan goals identify this DAU to be harvested at the "heavy" range. Current age criteria have indicated harvest levels that were light to moderate (Table 4).

Hunting over bait accounted for 72% of the harvest in DAU 2A in 2009, followed by still/stalk at 15% (Table 5). Rifle was the most common weapon used accounting for 73% of the harvest (Table 6).

Depredations

A record 12 depredation complaints were recorded during fall 1998, an indication of a poor huckleberry crop in DAU 2A. There were no depredation complaints in DAU 2A in 2009 (Table 7).

Dog-training Seasons

Dog-training season occurred during 2009 from 1-31 July (Appendix A).

Management Implications

DAU 2A receives moderate hunting pressure. The DAU is characterized by roadless habitats, public land, healthy black bear populations, and liberal hunting season frameworks. Harvest is light to moderate in the male component with 28% ≥5 years old for 2007-2009 average, meeting the desired objective ≥25%. The adult female segment remains secure in the roadless segments of the DAU, especially with the harvest restrictions on females with cubs.

DAU 2A has potential for high black bear numbers because of the quality habitat. Harvest was reduced dramatically from 1993-1996 under the previous black bear plan, but has increased dramatically since 1998 due to liberalized hunting season frameworks. Because black bear populations appear to be healthy, an opportunity to harvest more black bears became apparent and was deemed desirable to address elk calf recruitment concerns. Season length was extended to the end of June for the spring hunt and to the end of big game season in fall. Harvest more than doubled in 1998, and has remained at a high level since. Most of the harvest in this DAU typically occurs in the spring (82% in 2009).

AREA 3

DAU 3A (GMUs 16A, 17, 19, 20)

Abstract

During 2009, 142 black bears were harvested in DAU 3A, compared to the 2008 harvest of 128, and the previous 3-year average (2006-2008) of 135 bears harvested. Twenty-nine percent of the harvest consisted of females. This DAU consistently met the previous (1992-2000) management criteria objectives; the level of harvest relative to new (2000-2010) criteria have also suggested a lightly harvested population. Sixty-one percent of the black bears taken were harvested over bait.

Management Direction

This DAU probably serves as a reservoir of black bears for surrounding GMUs that are more heavily harvested. The Department will manage DAU 3A to maintain or increase historical harvest levels and distribution, although adjustments will be implemented to conform to statewide management direction. The bag limit for this DAU was doubled for fall 1999 to take advantage of high black bear numbers and to increase opportunity while also attempting to address concerns over low elk calf recruitment.

Background

Seasons have historically been 152 days long in DAU 3A but were reduced to 94 days beginning in 1993, then increased to 109 days in 1996. Seasons were increased to 159 days in 2000 and increased again in 2002 to the current season of 172 days with a 2 bear bag limit (Appendix A). Dog-training seasons have not been allowed, primarily because of the inability of hound hunters to effectively monitor their hounds in wilderness areas.

Most of DAU 3A lies within wilderness and has relatively abundant black bear habitat. The northern portions receive substantial rainfall and provide some of the best black bear habitat in the DAU. The habitat within wilderness is varied with a range from poor- to high-quality habitat that is available throughout the year over a variety of aspects and elevations. Because of low hunting pressure and restricted access, black bear populations are probably quite healthy. Incidental harvest during other big game seasons distributes some pressure across the DAU.

Population Surveys

Black bear bait station surveys have not been conducted in DAU 3A since 1996 (Table 1).

Harvest Characteristics

In 2009, 142 black bears were harvested in DAU 3A compared to 128 in 2008 and the previous 3-year average of 135. It should also be noted that the 192 bears harvested in 2003 and the 193 in 2004 are more than double the number killed in any other year prior to 2003 in this DAU. An

outfitter area overlap program resulted in a substantial increase in hunter participation in this predominantly wilderness DAU and the corresponding increase in harvest. Of the 142 bears harvested in 2009, 29% were females. Spring harvest accounted for 70% of the total harvest. Harvest criteria in the current (2000-2010) plan indicate light harvest levels. Forty-nine percent of the males harvested during the 2007-2009 reporting period were ≥5 years old (Tables 3 and 4). Most of the black bears harvested in 2009 were taken over bait (61%) followed by still/stalk (28%) (Table 5). Rifle was the most common weapon used (91%) to harvest a bear during the 2009 season (Table 6).

The black bear population data for DAU 3A suggest that a small proportion of the overall population is harvested. Age structures and harvest criteria indicate this population was the most lightly harvested DAU in the region.

Depredations

No depredations occurred in this DAU during 2009 (Table 7).

Dog-training Seasons

No dog-training season was offered in DAU 3A during 2009 (Appendix A). Hound hunting for black bears is impractical in this DAU due to lack of roads and high probability of losing hounds.

Management Implications

Black bear populations are healthy and have consistently fallen within desired levels in this DAU. Because of the adequate habitat within this DAU and light hunting pressure, the season structure proposed in the 2000-2010 Black Bear Management Plan allows for increased harvest, hence the 2-bear bag limit and extended seasons. This liberalized season framework also serves to address concerns over low calf elk recruitment rates.

Table 1. Bait station survey results, Clearwater Region, 1996-present.

Year	GMU(s) surveyed	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	90% confidence interval	
							%	(+/-)
1996	10, 12	7/2-9	17	8	40	4	10.0	7.8
	11	7/3-8	10	10	50	3	6.0	5.5
	15, 16	6/28-7/13	13	10	50	5	10.0	7.0
	19, 20	6/26-7/2	12	5	25	4	16.0	12.0
1997	10, 12	7/9-14	18	48	237	21	8.9	3.0
	11	7/9-14	10	10	50	8	16.0	8.5
	15, 16	7/9-14	73	73	365	15	4.1	1.7
1997[a]	10, 12	July-Aug	49	49	242	94	38.8	5.2
	15, 16	July-Aug	73	73	365	144	39.5	4.2
1998[a]	10, 12	July-Aug	59	59	293	114	38.9	4.7
	15, 16	July-Aug	72	72	352	95	27.0	3.9
1999[a]	10, 12	July-Aug	47	47	235	85	36.2	5.2
	15, 16	July-Aug	65	65	325	98	30.2	4.2
2000[a]	10, 12	July-Aug	60	59	295	71	24.1	4.1
	11	July	10	10	47	7	14.8	8.6
	15, 16	July-Aug	68	68	340	95	27.9	4.0
2001[a]	10, 12	July-Aug	66	66	329	72	21.9	3.8
	11	July	12	12	65	9	13.9	7.1
	15	July-Aug	64	64	316	85	26.9	4.1
2002[a]	10, 12	July-Aug	58	57	285	88	30.9	4.5
	11	July	16	13	65	9	13.9	7.1
	15	July-Aug	60	60	300	102	34.0	4.5
2003[a]	10, 12	July-Aug	67	67	318	87	26.7	4.1
	11	July	16	16	80	20	25.0	8.0
	15	July-Aug	67	67	325	128	39.4	4.5
2004[a]	10,12	July-Aug	67	61	305	106	34.8	4.5
	11	July	16	16	80	27	33.8	8.8
	15	July-Aug	67	65	325	101	31.1	4.2
2005[a]	10,12	June-Aug	67	51	253	70	27.7	4.6
	11	June-July	16	16	80	15	18.8	7.2
	15	June-July	67	49	245	86	35.1	5.0
2006[a]	10, 12	June-July	64	64	319	61	19.1	3.7
	11	June-July	16	16	80	35	43.8	9.2
2007[a]	10, 12	June-July	64	59	290	60	20.7	3.9
	11	June-July	16	16	80	16	20.0	7.4
2008[b]	ND	ND	ND	ND	ND	ND	ND	ND
2009[b]	ND	ND	ND	ND	ND	ND	ND	ND

[a] Transects conducted using bacon baits instead of sardines and leaving out 20 days.

[b] No bait station surveys were conducted since 2007.

Table 2. Black bear harvest by season and sex, Clearwater Region, 1998-present.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
1D												
1998	31	9	1	41	47	61	0	108	78	70	1	149
1999	24	16	0	40	55	20	0	75	79	36	0	115
2000	18	11	0	29	42	43	0	85	60	54	0	114
2001	19	11	0	30	50	32	0	82	69	43	0	112
2002	15	8	0	23	65	48	1	114	80	56	1	137
2003	43	28	0	71	62	47	0	109	105	75	0	180
2004	39	30	1	70	47	33	0	80	86	63	1	150
2005	37	21	0	58	46	35	0	81	83	56	0	139
2006	32	26	0	58	41	42	0	83	73	68	0	141
2007	42	30	2	74	55	21	0	76	97	51	2	150
2008	24	17	0	41	68	41	0	109	92	58	0	150
2009	28	16	0	44	42	35	0	77	70	51	0	121
3-yr. avg.	**31**	**21**	**1**	**53**	**55**	**32**	**0**	**88**	**87**	**53**	**1**	**141**
1E												
1998	13	8	0	21	27	15	0	42	40	23	0	63
1999	16	8	0	24	22	17	0	39	38	25	0	63
2000	20	8	0	28	22	14	0	36	42	22	0	64
2001	25	13	0	38	16	11	0	27	41	24	0	65
2002	14	12	1	27	36	13	0	49	50	25	1	76
2003	14	13	0	27	24	13	0	37	38	26	0	64
2004	21	8	0	29	22	12	0	34	43	20	0	63
2005	22	6	0	28	20	17	0	37	42	23	0	65
2006	16	13	0	29	20	14	0	34	36	27	0	63
2007	16	13	0	29	15	18	0	33	31	31	0	62
2008	20	13	0	33	22	18	0	40	42	31	0	73
2009	24	10	0	34	21	23	0	44	45	33	0	78
3-yr. avg.	**20**	**12**	**0**	**32**	**19**	**20**	**0**	**39**	**39**	**32**	**0**	**71**
1F												
1998	24	10	0	34	42	26	0	68	66	36	0	102
1999	16	14	0	30	37	14	0	51	53	28	0	81
2000	19	7	0	26	28	15	0	43	47	22	0	69
2001	19	10	0	29	30	11	0	41	49	21	0	70
2002	31	13	0	44	47	15	1	63	78	28	1	107
2003	35	22	0	57	45	22	0	67	80	44	0	124
2004	32	22	0	54	40	18	0	58	72	40	0	112
2005	38	23	0	61	46	38	0	84	84	61	0	145
2006	40	22	0	62	47	27	0	74	87	49	0	136
2007	34	20	0	54	59	34	0	93	93	54	0	147
2008	33	15	0	48	69	25	0	94	102	40	0	142
2009	34	18	0	52	68	39	0	107	102	57	0	159

Table 2. Continued.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
3-yr. avg.	**34**	**18**	**0**	**51**	**66**	**33**	**0**	**99**	**100**	**50**	**0**	**150**
2A												
1998	137	72	2	211	54	30	0	84	191	102	2	295
1999	130	85	0	215	27	16	0	43	157	101	0	258
2000	131	49	0	180	22	12	0	34	153	61	0	214
2001	155	86	0	241	18	13	0	31	173	99	0	272
2002	156	57	1	214	23	17	0	40	179	74	1	254
2003	171	99	1	271	37	16	0	53	208	115	1	324
2004	169	108	0	277	35	22	0	57	204	130	0	334
2005	169	106	0	275	21	11	0	32	190	117	0	307
2006	157	63	1	221	25	13	0	38	182	76	1	259
2007	163	99	0	262	37	20	0	57	200	119	0	319
2008	129	65	0	194	31	12	0	43	160	77	0	237
2009	146	60	0	206	30	14	0	44	176	74	0	250
3-yr. avg.	**146**	**75**	**0**	**221**	**33**	**15**	**0**	**48**	**179**	**90**	**0**	**269**
3A												
1998	29	8	1	38	23	14	0	37	52	22	1	75
1999	38	12	0	50	27	11	3	41	65	23	3	91
2000	28	16	0	44	30	4	0	34	58	20	0	78
2001	38	10	1	49	8	9	1	18	46	19	2	67
2002	47	17	1	65	27	7	0	34	74	24	1	99
2003	97	52	0	149	31	12	0	43	128	64	0	192
2004	106	49	1	156	26	11	0	37	132	60	1	193
2005	64	35	0	99	24	12	0	36	88	47	0	135
2006	83	48	0	131	14	9	0	23	97	57	0	154
2007	67	25	0	92	26	18	0	44	93	43	0	136
2008	63	33	1	97	21	10	0	31	84	43	1	128
2009	68	31	1	100	32	10	0	42	100	41	1	142
3-yr. avg.	**66**	**30**	**1**	**96**	**26**	**13**	**0**	**39**	**92**	**42**	**1**	**135**

Table 3. Age distribution of black bear, Clearwater Region, 1998-present.

DAU		Age											
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Total
1D													
1998	M	1	10	19	3	4	9	3	5	4	0	4	62
	F	0	11	13	7	5	2	4	1	1	2	9	55
1999	M	0	21	16	16	6	2	7	4	1	2	0	75
	F	0	10	4	6	3	3	1	2	2	1	1	33
2000	M	0	5	9	11	7	1	3	4	2	3	8	53
	F	0	14	10	13	6	2	5	0	1	0	1	52
2001	M	2	24	7	11	6	8	3	1	0	4	3	69
	F	0	12	5	5	1	4	4	3	0	3	3	40
2002	M	2	16	27	2	5	2	4	2	6	4	3	73
	F	0	11	12	5	2	2	3	3	4	0	10	52
2003	M	1	23	24	16	8	5	5	7	4	4	4	101
	F	0	13	14	6	8	7	4	5	1	4	12	74
2004	M	1	20	16	14	7	5	5	2	4	1	8	83
	F	0	5	11	7	7	3	5	4	4	3	13	62
2005	M	2	14	18	18	9	9	1	1	2	0	7	81
	F	0	7	7	18	4	4	3	1	2	3	3	52
2006	M	0	18	13	4	11	5	8	0	1	3	5	68
	F	0	10	14	10	9	3	5	0	1	3	9	64
2007	M	1	13	30	14	11	7	3	3	3	3	5	93
	F	0	6	7	13	5	4	1	3	0	2	5	46
2008	M	2	26	25	13	8	2	5	4	2	0	4	91
	F	1	5	11	9	5	2	5	3	2	0	12	55
2009	M	4	7	19	11	15	3	2	3	2	0	2	68
	F	0	4	12	4	8	5	2	2	2	0	5	44
1E													
1998	M	2	6	13	5	5	2	4	2	2	0	3	44
	F	1	2	7	2	5	0	2	1	0	1	3	24
1999	M	0	9	6	8	3	3	1	3	0	1	5	39
	F	0	3	2	6	5	3	1	1	2	0	3	26
2000	M	0	8	14	6	3	1	1	2	2	1	2	40
	F	0	0	3	3	5	0	2	0	2	0	6	21
2001	M	0	7	10	9	3	3	1	0	2	2	2	39
	F	0	4	4	5	2	2	0	3	0	0	4	24
2002	M	0	10	12	6	3	2	4	2	2	3	5	49
	F	0	1	7	5	3	3	1	1	1	1	2	25
2003	M	1	9	8	4	5	4	2	0	2	0	3	38
	F	0	4	2	6	1	2	0	1	1	2	7	26
2004	M	1	7	12	6	7	3	4	1	1	0	0	42
	F	0	4	5	3	2	1	1	0	1	0	2	19
2005	M	0	6	13	7	3	4	2	1	0	1	2	39
	F	0	0	6	3	2	2	0	4	2	0	4	23
2006	M	0	7	0	13	6	3	3	2	0	0	2	27
	F	0	5	9	5	2	2	2	0	0	0	2	36
2007	M	1	5	13	1	3	3	1	0	2	0	1	28

Table 3. Continued.

DAU		Age											
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Total
	F	1	6	6	2	5	3	0	0	1	1	3	30
2008	M	1	7	8	7	4	3	2	2	1	2	3	40
	F	1	8	1	4	1	3		1	1	1	7	28
2009	M	2	7	14	7	3	0	3	2	1	1	2	42
	F	0	3	10	6	3	0	6	0	1	0	3	32
1F													
1998	M	1	7	11	9	7	3	3	3	0	3	4	51
	F	2	2	6	1	7	2	3	1	1	2	6	33
1999	M	0	8	11	8	7	4	3	3	3	2	6	55
	F	0	2	5	2	3	4	0	3	1	2	7	29
2000	M	1	4	12	9	7	1	2	1	4	1	1	43
	F	1	1	3	4	3	2	0	1	1	0	6	22
2001	M	1	12	6	8	4	6	7	2	1	1	2	50
	F	0	1	3	5	1	2	0	1	0	1	4	18
2002	M	1	10	19	5	14	5	6	1	1	3	9	74
	F	0	2	5	4	1	1	2	2	1	3	5	26
2003	M	0	8	18	18	5	4	6	6	2	3	7	77
	F	0	4	7	12	3	2	2	2	0	0	6	38
2004	M	0	8	19	7	13	2	2	3	1	2	5	62
	F	0	0	3	9	3	0	4	2	1	1	10	33
2005	M	0	14	13	19	8	3	4	5	1	0	11	78
	F	1	8	7	15	3	8	4	1	1	1	5	54
2006	M	0	13	15	5	16	6	4	4	4	3	5	41
	F	0	5	4	8	4	3	5	2	3	2	5	75
2007	M	1	12	26	13	8	5	8	11	1	1	3	51
	F	1	3	14	3	6	4	1	2	2	4	11	89
2008	M	0	18	26	15	13	7	8	4	1	2	6	100
	F	0	4	3	6	4	2	3	4	0	1	11	38
2009	M	1	12	21	19	18	6	8	4	3	2	8	102
	F	0	6	11	10	7	4	1	2	2	2	12	57
2A													
1998	M	0	8	24	39	28	15	11	5	8	4	21	163
	F	1	5	6	15	9	7	4	7	2	4	25	85
1999	M	1	3	14	21	20	31	13	13	8	8	19	151
	F	0	2	9	7	14	10	10	12	5	4	23	96
2000	M	0	0	9	15	0	16	15	9	6	5	18	93
	F	0	0	2	7	13	11	4	2	0	0	8	47
2001	M	0	23	7	11	23	28	13	23	10	5	25	168
	F	0	9	1	12	4	7	8	7	6	8	33	95
2002	M	0	4	101	5	7	10	9	12	11	5	10	174
	F	0	3	28	5	5	2	6	8	4	0	10	71
2003	M	1	22	41	80	6	9	6	4	9	4	22	204
	F	0	7	8	41	4	7	8	6	3	6	22	112
2004	M	0	9	42	31	43	3	6	5	12	5	18	174
	F	1	5	14	14	32	0	5	5	8	6	23	113
2005	M	0	9	31	59	24	30	2	5	1	5	18	184
	F	0	5	8	25	16	18	0	2	4	2	33	113

Table 3. Continued.

DAU		Age											
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Total
2006	M	0	8	48	20	34	11	11	2	3	3	10	60
	F	0	1	7	6	17	4	4	1	1	0	19	150
2007	M	0	18	35	43	20	25	5	10	0	2	16	94
	F	0	8	9	21	9	11	6	9	0	3	18	174
2008	M	0	11	40	31	37	7	12	4	4	2	5	153
	F	0	5	10	13	12	8	5	2	7	2	11	75
2009	M	0	10	35	58	18	17	6	13	4	3	4	168
	F	0	0	10	14	4	8	4	4	2	4	17	67
3A													
1998	M	0	1	6	6	8	9	3	1	0	3	10	47
	F	0	1	2	2	1	2	2	2	2	2	5	21
1999	M	0	2	8	12	1	3	3	2	1	4	19	55
	F	0	2	1	3	4	2	4	2	0	0	5	23
2000	M	0	2	9	5	7	2	8	7	0	0	11	51
	F	0	0	1	3	1	2	2	2	2	0	7	20
2001	M	0	2	1	6	5	7	3	8	6	3	4	45
	F	0	0	0	4	1	1	1	1	2	0	7	17
2002	M	0	5	17	2	9	5	7	2	4	4	11	66
	F	0	1	2	1	4	1	1	2	4	1	4	21
2003	M	0	8	10	23	3	5	6	7	6	12	44	124
	F	0	0	7	13	1	2	6	3	4	8	18	62
2004	M	0	3	14	20	17	9	6	6	6	8	34	123
	F	0	1	5	3	14	4	1	2	4	3	19	56
2005	M	0	5	7	14	11	11	3	6	6	1	19	83
	F	0	1	1	3	8	5	0	4	0	3	16	41
2006	M	0	6	15	7	16	12	13	2	4	3	16	51
	F	0	2	3	8	11	5	2	1	3	1	15	94
2007	M	0	7	13	12	9	5	2	8	1	4	19	38
	F	0	3	6	7	4	4	5	1	1	0	7	80
2008	M	1	5	11	13	12	5	10	4	7	0	13	81
	F	0	2	4	5	3	5	1	3	2	3	8	36
2009	M	0	7	14	20	11	11	7	5	2	3	16	96
	F	0	0	4	3	7	3	5	5	1	1	12	41

Table 4. 2000-2010 Black Bear Plan management values and criteria, Clearwater Region, 1998-present.

DAU Year	*n*[a]	% Females	% Males[b] ≥5	# Males[b] ≥5
1D				
1998	148	47	32	25
1999[c]	115	31	20	16
2000	114	47	35	21
2001	112	38	28	19
2002	136	41	26	21
2003	180	42	28	29
2004	149	42	29	25
2005	139	40	25	20
2006	141	48	32	22
2007	150	34	26	24
2008	150	39	19	17
2009	121	42	18	12
3-year avg.	**141**	**38**	**21**	**18**
Desired levels		**≤40**	**≥20**	
1E				
1998	63	37	33	13
1999	63	40	34	13
2000	64	34	21	9
2001	65	37	24	10
2002	75	33	36	18
2003	64	41	29	11
2004	63	32	21	9
2005	65	35	26	10
2006	63	43	28	10
2007	62	50	23	7
2008	66	42	33	13
2009	78	42	21	9
3-year avg.	**69**	**45**	**26**	**10**
Desired levels		**≤40**	**≥20**	
1F				
1998	102	35	24	16
1999	81	35	40	21
2000	69	32	21	10
2001	70	30	39	19
2002	106	26	32	25
2003	124	35	35	28
2004	112	36	21	15
2005	145	42	31	24
2006	136	36	35	26

Table 4. Continued.

DAU Year	*n*[a]	% Females	% Males[b] ≥5	# Males[b] ≥5
2007	147	37	33	29
2008	142	34	28	28
2009	159	36	30	31
3-year avg.	**149**	**36**	**30**	**29**
Desired levels		**≤35**	**≥20**	
2A				
1998	293	35	34	64
1999	258	39	59	92
2000	214	29	45	69
2001	272	36	60	104
2002	253	29	32	57
2003	323	36	26	54
2004	334	39	24	49
2005	307	38	33	61
2006	260	29	27	40
2007	319	37	33	58
2008	237	32	22	34
2009	250	30	28	47
3-year avg.	**269**	**33**	**28**	**46**
Desired levels		**≤40**	**≥25**	
3A				
1998	74	30	50	26
1999	88	26	49	32
2000	78	26	48	28
2001	65	29	67	31
2002	98	24	45	33
2003	192	33	63	80
2004	192	31	52	69
2005	135	35	55	46
2006	154	37	53	50
2007	136	32	52	48
2008	128	34	48	39
2009	142	29	46	44
3-year avg.	**135**	**32**	**49**	**44**
Desired levels		**≤40**	**≥30**	

[a] Number of black bears that were sexed (excluding unknowns).
[b] Number of black bears that were aged (excluding unknowns).
[c] Spring only age data.

Table 5. Method of black bear harvest, Clearwater Region, 1998-present.

DAU Year	Bait	Hound	Still	Incidental	Other	Total
1D						
1998	0	35	36	66	1	138
1999	0	22	48	39	0	109
2000	0	53	15	44	1	113
2001	2	49	32	29	0	112
2002	0	56	30	51	0	137
2003	1	95	30	53	1	180
2004	0	88	23	36	3	150
2005	1	66	36	34	2	139
2006	3	83	22	32	1	141
2007	1	80	32	35	2	150
2008	1	70	24	52	3	150
2009	0	49	32	39	1	121
1E						
1998	6	7	25	22	5	65
1999	11	6	15	31	2	65
2000	13	4	18	30	1	66
2001	12	14	24	15	3	68
2002	10	5	33	28	0	76
2003	8	9	19	23	5	64
2004	21	11	17	14	0	63
2005	16	10	21	17	1	65
2006	15	7	26	14	1	63
2007	19	8	21	11	3	62
2008	18	10	27	17	1	73
2009	20	11	25	22	0	78
1F						
1998	27	25	17	33	3	105
1999	17	35	11	21	0	84
2000	9	28	15	17	2	71
2001	17	22	18	12	3	72
2002	24	29	34	18	2	107
2003	40	20	34	30	0	124
2004	29	29	34	20	0	112
2005	47	24	47	25	2	145
2006	56	30	29	21	0	136
2007	53	30	26	34	4	147
2008	51	18	51	22	0	142
2009	60	26	37	34	2	159
2A						
1998	150	41	43	53	4	291

Table 5. Continued.

DAU Year	Bait	Hound	Still	Incidental	Other	Total
1999	152	17	41	47	2	259
2000	139	28	24	21	2	214
2001	199	17	39	15	2	272
2002	163	15	50	20	6	254
2003	226	17	62	16	3	324
2004	222	29	52	29	2	334
2005	236	13	40	11	7	307
2006	184	13	43	13	5	258
2007	259	11	26	21	2	319
2008	168	12	40	14	3	237
2009	181	6	37	17	9	250
3A						
1998	16	5	25	23	1	70
1999	19	7	35	22	3	86
2000	12	4	35	20	6	77
2001	35	4	15	10	1	65
2002	40	4	37	17	1	99
2003	108	12	54	13	5	192
2004	124	6	52	9	2	193
2005	73	8	42	11	1	135
2006	104	5	31	11	3	154
2007	89	1	31	10	5	136
2008	90	1	27	7	3	128
2009	86	1	40	10	5	142

Table 6. Weapon type used to harvest black bear, Clearwater Region, 1998-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1D						
1998	132	3	1	3	0	139
1999	99	4	1	6	0	110
2000	97	12	0	1	3	113
2001	96	13	0	3	0	112
2002	111	18	1	6	1	137
2003	159	15	0	5	1	180
2004	130	15	0	5	0	150
2005	127	8	0	4	0	139
2006	118	13	1	4	5	141
2007	131	13	0	5	1	150
2008	120	16	0	4	10	150
2009	102	8	0	3	7	121
1E						
1998	56	7	1	0	1	65
1999	64	1	0	0	0	65
2000	51	8	3	1	3	66
2001	61	3	0	2	2	68
2002	61	13	1	1	0	76
2003	54	8	0	1	1	64
2004	50	8	0	5	0	63
2005	55	8	0	2	0	65
2006	51	7	1	2	2	63
2007	54	7	0	0	1	62
2008	60	11	0	2	0	73
2009	74	2	0	2	0	78
1F						
1998	94	4	0	5	2	105
1999	76	4	0	2	2	84
2000	61	6	0	2	2	71
2001	66	3	0	1	2	72
2002	96	5	2	4	0	107
2003	104	10	6	3	1	124
2004	92	7	4	7	2	112
2005	121	14	3	7	0	145
2006	111	23	0	2	0	136
2007	129	10	3	1	4	147
2008	125	10	4	2	1	142
2009	137	18	0	2	2	159
2A						
1998	221	54	3	12	1	291

Table 6. Continued.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1999	197	49	3	9	1	259
2000	160	41	3	5	5	214
2001	192	53	6	15	6	272
2002	197	45	4	6	2	254
2003	254	53	9	3	5	324
2004	259	59	4	9	3	334
2005	224	69	6	6	2	307
2006	191	54	4	3	7	259
2007	221	79	6	8	5	319
2008	182	48	1	4	2	237
2009	182	61	2	4	1	250
3A						
1998	63	3	0	4	0	70
1999	76	9	0	2	0	87
2000	70	4	0	1	2	77
2001	51	6	4	3	1	65
2002	73	21	2	3	0	99
2003	158	22	3	8	1	192
2004	166	17	3	7	0	193
2005	126	7	0	2	0	135
2006	136	9	3	4	2	154
2007	116	12	1	5	2	136
2008	114	11	1	2	0	128
2009	129	8	0	4	1	142

Table 7. Black bear depredation complaints, Clearwater Region, 1998-present.

	DAU					
Year	1D	1E	1F	2A	3A	Total
1998	9	10	17	12	2	50
1999	6	10	1	2	1	20
2000	8	7	2	0	0	17
2001	2	5	0	3	2	12
2002	4	3	0	0	0	7
2003	6	2	4	2	0	14
2004	1	1	0	0	0	2
2005	0	1	0	0	0	1
2006	2	9	1	0	0	12
2007	1	4	4	1	0	10
2008	0	5	1	0	0	6
2009	0	2	1	0	0	3

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	3	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

SOUTHWEST REGION

Abstract

Four hundred and thirty-two black bears of known sex were reported harvested in the Southwest Region in 2009. Of those, 390 black bears were reported harvested in Area 1, and 42 were reported harvested in DAU 3B of Southwest Region. Monitoring efforts included a non-invasive mark-recapture project by the Southwest region using DNA hair-snags at 77 grid cells (one 28 cell grid and one 49 cell grid) in GMU 33 and 34 (DAU 1K and 1L) on the Boise National Forest, in cooperation with Washington State University (WSU). Southwest regional staff also provided technical assistance to WSU in implementing 2 additional DNA hair-snag grids (48 cells each) in GMU 32A and 39 (DAU 1H and IK), on the Payette and Boise National Forests. Reported harvest in Area 1 was 115, 94, and 181 black bears for DAUs 1G, 1H, and 1K, respectively, during 2009 hunting seasons. The reported harvest in Area 1 in 2009 was 14% lower than that reported in 2008. Data indicate percent females and percent males ≥5 years-of-age in the harvest criteria are being met in all 3 DAUs. Baiting methods comprised most of the harvest in DAU 1G and 1K in 2009. Still hunting (stalking) and hound hunting methods contributed to the majority of black bear harvest in DAU 1H. Data for DAU 1G indicate harvest criteria are stable. Data for DAU 1H indicate a steady increase in harvest over the past ten years. Harvest data for DAU 1K indicate that elimination of the fall split season in 1998 and increase in spring season in 2002 contributed to a significant increase in black bear harvest.

Harvest criteria are being met in DAU 3B with current harvest levels**.** Harvest methods in DAU 3B were well distributed between still hunting (stalking), baiting, and incidental take. Season changes were incorporated into the 2000-2010 Black Bear Species Management Plan to make this area consistent with statewide management direction.

AREA 1

DAU 1G (GMUs 19A, 23, 24, 25)

Management Direction

Area 1 contains 12 DAUs. Harvest guidelines and population characteristic targets provide management goals for these DAUs. The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities.

The plan called for monitoring certain population characteristics as reflected in the harvest over 3-year segments to evaluate the status of black bear populations. In DAUs where data indicated harvest reductions were necessary, the Department would evaluate harvest distribution, hunter density, season of harvest, and hunting methods before making a recommendation. Male, female, and overall median age and percent females were the harvest criteria monitored during the 1992-2000 planning period.

New, simpler criteria were developed in the 2000-2010 Black Bear Species Management Plan and took effect in the 1999 fall hunting season. These harvest criteria are the 3-year running average of percent females and percent males ≥5 years old. Bait station survey trends are also considered when assessing population status. Harvest rates are categorized as light, moderate, and heavy (Table 1). DAU 1G is managed for moderate harvest rates.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Year-round black bear seasons and extra black bear tags were eliminated in DAU 1G in 1986. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into the 2009 framework (Appendix A).

Population Surveys

No population surveys were conducted in this area during the reporting period. Previous bait station survey results are summarized in Table 2.

Harvest Characteristics

Reported harvest of known sex black bears in DAU 1G decreased slightly in 2009 compared to 2008-reported harvest (Table 3). The black bear harvest in this DAU was greater in fall than spring in 2009. Age data indicate 3-year-old male bears were the most frequently harvested age group (Table 4). Percent female in the harvest criteria was within acceptable limits (Table 5). There was adequate distribution of harvest among user groups in DAU 1G in 2009 (Table 6). The rifle is the most common weapon used for harvesting black bear in DAU 1G (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1G. Most complaints are associated with poor garbage disposal practices. Some livestock, orchard, and apiary depredations have also occurred in this DAU. One confirmed livestock depredation was reported in DAU 1G in 2009 (Table 8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies provide for thriving black bear populations in which a hunter could expect to encounter a lot of black bears and have an elevated chance of harvesting one. Moderate harvest is designed to provide maximum hunter opportunity yet maintain a viable self-sustaining black bear population. Heavy harvest criteria are employed where an obvious desire exists to severely reduce a black bear population. Areas of heavy harvest may not maintain a viable, self-sustaining black bear population over the long term.

DAU 1G appeared to be within acceptable harvest levels in 1998. As a result, the first 2 weeks of October were added back into the fall season to eliminate the split that caused confusion and regulation complication for sportsmen. This season change increased bear harvest by more than 30%. Harvest parameters remained within desired limits. Subsequently, the fall 2000 season was opened on 30 August in this DAU to restore some hunter opportunity lost when seasons were curtailed in the early 1990s. This change also increased bear harvest in the DAU. The 2009 harvest season reflected the ninth year of monitoring this change. Younger bears have become more preponderant in the harvest. The current season framework appears to maintain a stable bear population in DAU 1G. The current season framework should be monitored through the 2010 season to further assess changes in harvest criteria and subsequent impact to the bear population.

DAU 1H (GMUs 22, 31, 32, 32A)

Management Direction

The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities. This included high quality controlled hunts in DAU 1H.

New, simpler criteria were developed in the 2000-2010 Black Bear Species Management Plan and took effect in the 1999 fall hunting season. These harvest criteria were the 3-year running average of percent females and percent males ≥5 years old. Bait station survey trends were also considered when assessing population status. Harvest rates were categorized as light, moderate, and heavy (Table 1). DAU 1H has been managed for light harvest of black bear.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Season restrictions in DAU 1H were designed to protect the vulnerable black bear populations in that area. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into 2009 (Appendix A).

Population Surveys

A hair-snare grid was implemented in the Little Weiser and Middle Fork Weiser River drainages in July 2008 to assess population characteristics. Three hundred sixty-seven hair samples were collected and sent to Wildlife Genetics International for analysis. A density estimate of 0.99 bears/square mile was derived using Program Mark. Southwest regional staff also provided technical assistance to Washington State University personnel in implementing another DNA hair-snag grid (48 cells) in GMU 32A on the Payette National Forest in 2009. Sample processing is pending.

Harvest Characteristics

Reported harvest in 2009 was 18% lower than that reported for 2008 (Table 3). More bears were harvested in the fall than in the spring season in 2009. Age data indicate 2-year-old male bears were the most frequently harvested age group (Table 4). Percent female in the 2009 harvest was lower than that reported in 2008 (Table 5). Still and hound hunting methods are the dominant means of harvest in DAU 1H (Table 6). The rifle is the most used weapon of choice (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1H. Most complaints are associated with poor garbage disposal practices. Some livestock, orchard, and apiary depredations do occur in this DAU. Two confirmed livestock depredations were reported in 2009 in DAU 1H (Table 8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies provide for thriving black bear populations in which a hunter could expect to encounter a lot of black bears and have an elevated chance of harvesting one. Moderate harvest is designed to provide maximum hunter opportunity yet maintain a viable self-sustaining black bear population. Heavy harvest criteria are employed where an obvious desire exists to severely reduce a black bear population. Areas of heavy harvest may not maintain a viable, self-sustaining black bear population over the long term.

Harvest parameters in DAU 1H showed a trend toward too many female black bears in the harvest. This did not seem logical under a conservative controlled hunt strategy; however, most black bears were harvested in September when females are vulnerable. The 15 April-15 May spring season framework is a less vulnerable time period for female black bears; hence, spring permits were increased in 1998 to attempt to skew the sex ratio of the harvest further toward male black bears. This strategy did not yield the most promising results. Black bear harvest had become nearly equal between the 2 seasons. Fall permits were increased from 30 to 50 in 2000 and the season extended to the end of October to respond to a clamor about increased black bear sightings in this DAU and another attempt at influencing male black bear harvest. This increase in permits did not lead to an appreciable increase in fall bear harvest. Subsequently, the spring and fall permit levels were increased to 75 each, beginning with the fall 2003 season. This change has caused an appreciable increase in male harvest.

The goal is to continue to increase the percentage of males in the harvest and to maintain a 30% or higher hunter success rate (3-yr average success rate is 33%). It may turn out that the controlled hunt area is too small to protect the wider ranging adult male black bear and a harvest rate of 30% or greater females may be the norm for a lightly hunted population under these conditions. Education regarding species management plan harvest goals and population objectives is needed to help sportsmen understand that the seasons in this DAU are meant to provide for high black bear numbers and an increased chance for seeing black bears.

DAU 1K (GMUs 33, 39, 43)

Management Direction

The 1992-2000 Black Bear Species Management Plan directed the Department to manage Area 1 to maintain or reduce harvest, improve age structure, and offer a variety of hunting opportunities. This included high quality controlled hunts in DAU 1K.

The 2000-2010 Black Bear Species Management Plan maintained those objectives. New, simpler criteria were developed in the new Plan and took effect in the 1999 fall hunting season. These harvest criteria were the 3-year running average of percent females and percent males ≥5 years old. Bait station survey trends and other population data were also considered when assessing population status. Harvest rates were categorized as light, moderate, and heavy (Table 1). DAU 1K objectives were to manage for moderate harvest rates.

Background

A statewide mandatory report requirement for harvested black bear was introduced in 1983. Most seasons in Area 1 were restricted in 1983 following implementation of the 1981-1985 Black Bear Management Plan. Area 1 was divided into DAUs when the 1986-1990 Black Bear Management Plan was implemented in 1986. Uniform seasons by DAU and more restrictive season structures were introduced at that time. Slight modifications to the seasons proposed in the 1986-1990 Plan were made based on monitoring of 3 consecutive years of harvest data and were reflected in the 1992 black bear harvest season. Further season reductions were incorporated into the 1992-2000 Black Bear Management Plan and took effect with the beginning of the 1993 black bear harvest season. More liberal seasons were implemented in fall 1998 and were continued into the 2009 framework (Appendix A).

Population Surveys

Monitoring efforts included a non-invasive mark-recapture project by the Southwest region using DNA hair-snags at 77 grid cells (one 28 cell grid and one 49 cell grid) in GMU 33 and 34 (DAU 1K and 1L) on the Boise National Forest, in cooperation with Washington State University (WSU). Each grid cell encompassed 6.25 km^2. One-hundred and seventy-two (172) bear hair samples were sent to lab for genetic analysis with intent of using a mark-recapture model to estimate bear numbers and density within the study area. Seventy-two individuals were marked between the 2 study areas (26 females, 46 males). Southwest regional staff also provided technical assistance to WSU in implementing an additional DNA hair-snag grid (48 cells) in GMU 39 (DAU IK), on the Boise National Forests. One hundred and two (102) bear hair samples were set for genetic analysis, resulting in identification of 45 individuals on the GMU 39 grid (24 females, 21 males).

Harvest Characteristics

Reported harvest decreased 16% in 2009 when compared to 2008 totals in DAU 1K (Table 3). Hunters harvested twice as many bears in spring than fall in 2009. Age data indicated 3-year-old

male bears were the most frequently harvested age group (Table 4). Criteria for percent females in the harvest were within acceptable levels (Table 5). Baiting was the most frequently used method to kill black bears in DAU 1K in 2009 (Table 6). Rifle was the most reported weapon of choice in DAU 1K (Table 7).

Depredations

Black bear nuisance complaints occur regularly in DAU 1K. Most complaints are associated with poor garbage disposal practices and/or outdoor placement of domestic pet food or wild birdseed. Some livestock, orchard, and apiary depredations also occur in this DAU. One confirmed livestock depredation was recorded in DAU 1K in 2009, involving the loss of 2 sheep (Table 8). Tracking of depredation reports is sporadic at best and a more concerted effort is needed to improve reporting.

Management Implications

The 2000-2010 Black Bear Species Management Plan identifies 3 harvest-level targets for black bear populations: light, moderate, and heavy. Light harvest strategies were implemented to maintain thriving and possibly increasing black bear populations in which a hunter could expect to encounter numerous and older age class bears, and have an elevated chance of harvesting one. Moderate harvest strategies were designed to provide maximum hunter opportunity yet maintain a viable self-sustaining and static black bear population. A heavy harvest criterion was employed where objectives were to reduce a black bear population. Areas of heavy harvest may not be sustainable over the long term unless habitat between adjacent populations allows for connectivity and dispersal.

The fall split season was eliminated in 1998 in DAU 1K for the same reasons as mentioned above for DAU 1G. This change did result in a significant increase in fall black bear harvest, as well as overall annual harvest (Table 5). This increase was also apparent in the 1999 harvest. The Commission further expanded season lengths for the spring 2002 black bear season and thus harvest which has been sustained over the last decade at moderately higher levels. Major fluctuations in annual harvest seem to be closely correlated to food availability (e.g. 2007 drought and food shortage). Harvest criteria for percent female bears and percent males ≥5 years old in DAU 1K continues to be maintained at the level desired in 2009 (Table 5). Harvest data need to continue to be monitored closely to determine any new trends in the data.

AREA 3

DAU 3B (GMUs 20A, 26, 27)

Management Direction

Area 3 is divided into 2 analysis units, one north and one south of Salmon River. Harvest in this area is dominated by young, dispersing black bears and occurs mostly along river corridors and backcountry landing strips. The harvest is not thought to be reflective of the overall population. The Department will manage Area 3 black bear populations to maintain moderate harvest targets

of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest. Minor season adjustments may be implemented to conform to statewide management direction. There is no dog-training season in Area 3.

Harvest in Area 3 was consistently low, resulting in small samples from which to monitor harvest parameters. Harvest criteria will be monitored but will only apply if average annual harvest is at least 30 black bears. Professional judgment will be used when average annual harvest is less than 30 black bears.

Background

A large portion of DAU 3B is roadless, lying within the Frank Church River-of-No-Return Wilderness boundaries. Except for a few mining roads penetrating the periphery, access in these GMUs is restricted to boat, airplane, pack-string, or foot travel. A statewide mandatory report requirement for harvested black bear was introduced in 1983. Year-round seasons and extra black bear tags were eliminated with implementation of the 1986-1990 Black Bear Management Plan. Seasons were shortened to conform to statewide management direction listed in the 1992-2000 Black Bear Management Plan. The fall and spring seasons were expanded again with implementation of the 2000-2010 Black Bear Species Management Plan (Appendix A).

Population Surveys

No population surveys were conducted in DAU 3B during the reporting period.

Harvest Characteristics

Reported harvest in 2009 was 16% lower than that reported in 2008 (Table 3). Black bear harvest in DAU 3B was greater in the fall than spring season. Age data indicate 3-year-old male bears were the most frequently harvested age group (Table 4). Percent females in the harvest was lower in 2009 than that reported in 2008 (Table 5). Still hunting was the primary method of harvest in this DAU (Table 6). The prominent weapon of choice in DAU 3B is the rifle (Table 7).

Depredations

No depredations were recorded in DAU 3B in 2009 (Table 8).

Management Implications

Historical harvest in DAU 3B was usually low and small sample sizes precluded meaningful interpretation of harvest criteria. Minor changes to season structure were incorporated into the 1992-2000 Black Bear Management Plan to make this DAU consistent with statewide management direction. Minor changes to the fall season structure were implemented with the 2000-2010 Black Bear Species Management Plan. A 2-black bear bag limit, discounted nonresident bear tag fees, and a longer fall season was adopted by the Commission beginning with the 2000 season in response to sportsmen's concerns of black bear predation on elk calves

in the Middle Fork Elk Zone. Harvest criteria remain within acceptable limits in DAU 3B. The Department will continue to monitor harvest criteria for DAU 3B to assess the effects of season changes on black bear populations.

Table 1. Harvest criteria for black bear in Idaho.

Criteria	Light harvest	Moderate harvest	Heavy harvest
% Females	<30	30-40	>40
% Males ≥5	>35	25-35	<25
Bait station survey	Increasing	Stable	Decreasing

Table 2. Bait station (pork fat and anise oil) survey results from DAU 1G, 2003-2007.

Year	Survey number	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	90% confidence interval	
							%	(+/-)
2003	1	7/22-8/14	92	20	100	20	20	6.6
2004	1	7/7-8/3	92	48	240	70	29	4.8
2005	1	7/6-8/2	92	66	330	93	28	4.1
2006	1	7/12-8/13	92	68	340	86	25	3.9
2007	1	7/10-8/6	92	66	330	108	33	5.3

Table 3. Black bear harvest by season and sex, Southwest Region, 1998-present.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
1G									
1998	38	10	48	36	19	55	74	29	103
1999	38	16	54	51	32	83	89	48	137
2000	43	12	55	59	23	82	102	35	137
2001	34	18	52	46	33	79	80	51	131
2002	37	13	50	57	35	92	94	48	142
2003	41	12	53	57	39	96	98	51	149
2004	34	15	49	55	33	88	89	48	137
2005	35	17	52	61	29	90	96	46	142
2006	40	8	48	58	25	83	98	33	131
2007	34	23	57	70	43	112	104	66	170
2008	20	5	25	57	39	96	77	44	121
2009	39	10	49	41	25	66	80	35	115
3-yr. avg.	**31**	**13**	**44**	**56**	**36**	**92**	**87**	**48**	**137**
1H									
1998	23	10	33	21	12	33	44	22	66
1999	14	10	24	16	12	28	30	22	52
2000	23	13	36	15	18	33	38	31	69
2001	17	8	25	14	22	36	31	30	61
2002	25	9	34	22	16	38	47	25	72
2003	18	6	24	23	28	51	41	34	75
2004	17	14	31	33	18	51	50	32	82
2005	30	8	38	23	26	49	53	34	87
2006	26	18	44	20	25	45	46	43	89
2007	17	18	35	29	23	52	46	41	87
2008	42	15	57	28	30	58	70	45	115
2009	30	10	40	35	19	54	65	29	94
3-yr. avg.	**30**	**14**	**44**	**31**	**24**	**37**	**60**	**38**	**99**
1K									
1998	39	24	63	75	55	130	114	79	193
1999	66	26	92	65	42	107	131	68	199
2000	55	26	81	76	65	141	131	91	222
2001	66	30	96	65	42	107	131	72	203
2002	104	35	139	77	56	133	181	91	272
2003	87	59	146	47	29	76	134	88	222
2004	105	44	149	59	45	104	164	89	253
2005	109	54	163	48	37	85	157	91	248
2006	87	38	124	71	32	103	158	70	228
2007	110	61	171	72	45	117	182	106	288
2008	104	44	148	35	36	71	139	80	219
2009	82	36	118	35	28	63	117	64	181

Table 3. Continued.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
3-yr. avg.	**99**	**47**	**108**	**47**	**36**	**84**	**146**	**83**	**232**
3B									
1998	9	6	15	9	5	14	18	11	29
1999	2	0	2	19	15	34	21	15	36
2000	3	1	4	23	13	36	26	14	40
2001	5	4	9	29	13	42	34	17	51
2002	7	5	12	40	17	57	47	22	69
2003	17	6	23	19	11	30	36	17	53
2004	12	9	21	32	12	44	44	21	65
2005	11	7	18	18	7	24	29	14	43
2006	13	7	20	22	9	31	35	16	51
2007	12	4	16	25	13	38	37	17	54
2008	10	12	22	18	10	28	28	22	50
2009	10	2	12	24	6	30	34	8	42
3-yr. avg.	**11**	**6**	**17**	**22**	**10**	**32**	**33**	**16**	**49**

Table 4. Age distribution of black bear, Southwest Region, 1998-present.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
1G														
1998	M	0	6	8	10	14	10	10	3	2	2	7	2	74
	F	0	4	6	4	3	2	3	0	0	3	0	4	29
1999	M	0	12	17	14	2	6	1	8	1	1	13	14	89
	F	0	6	7	6	2	5	5	3	0	3	5	6	48
2000	M	0	4	31	18	7	4	9	5	3	1	10	10	102
	F	1	1	4	4	2	3	4	4	0	1	7	4	35
2001	M	1	16	6	23	4	6	2	2	5	2	6	7	80
	F	0	4	4	4	3	4	2	7	5	1	11	6	51
2002	M	0	3	26	10	16	5	5	1	4	7	9	8	94
	F	0	8	8	2	5	3	3	2	3	0	9	5	48
2003	M	0	17	11	25	7	11	5	3	2	3	7	7	98
	F	1	8	8	7	4	7	2	1	1	1	8	3	51
2004	M	3	10	21	14	12	5	6	0	3	2	8	5	89
	F	1	0	7	8	5	5	0	2	2	3	9	6	48
2005	M	0	13	14	16	11	15	1	7	2	1	15	1	96
	F	0	3	3	7	6	8	4	2	2	2	8	1	46
2006	M	1	8	13	18	21	10	6	4	3	1	9	4	98
	F	1	2	3	3	8	4	1	1	3	1	4	2	33
2007	M	2	16	14	16	7	10	4	5	2	10	10	8	104
	F	0	11	9	7	5	7	4	3	5	3	10	2	66
2008	M	0	12	22	9	11	2	3	3	2	0	7	6	77
	F	0	2	7	6	5	1	1	4	2	1	10	5	44
2009	M	0	7	14	18	8	8	5	5	1	2	9	3	80
	F	1	7	3	7	2	3	3	2	1	1	1	4	35
1H														
1998	M	0	3	13	4	8	2	2	2	1	1	5	3	44
	F	0	0	4	3	2	0	2	1	3	2	1	4	22
1999	M	0	5	6	3	3	3	3	0	3	0	3	1	30
	F	0	1	2	3	1	3	1	1	1	0	5	4	22
2000	M	0	2	9	4	5	2	5	1	3	0	0	7	38
	F	0	0	6	2	6	3	0	3	3	0	6	2	31
2001	M	0	6	5	7	2	5	1	0	1	0	1	3	31
	F	0	1	4	7	2	4	3	0	0	2	4	3	30
2002	M	0	5	13	3	8	1	4	0	2	1	5	5	47
	F	0	2	0	4	6	2	1	0	0	1	6	3	25
2003	M	0	4	9	11	3	3	1	2	0	2	1	5	41
	F	0	5	7	5	2	2	2	3	0	1	3	4	34
2004	M	0	9	13	2	6	4	2	2	0	3	7	2	50
	F	0	3	9	4	2	1	4	0	0	0	3	6	32
2005	M	0	5	7	11	5	5	4	2	1	3	4	6	53
	F	0	6	2	3	3	4	3	1	3	4	4	1	34
2006	M	0	5	7	7	7	2	3	2	2	0	7	4	46
	F	0	3	8	5	3	4	8	2	2	2	6	0	43

Table 4. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
2007	M	0	5	8	7	7	5	0	3	1	2	4	4	46
	F	0	2	6	4	6	2	2	1	1	4	9	4	41
2008	M	0	9	12	5	10	5	6	8	1	2	10	2	70
	F	0	2	5	7	6	5	7	2	1	0	7	3	45
2009	M	0	7	17	8	6	3	4	5	3	3	6	3	65
	F	0	1	3	2	2	3	5	0	2	0	4	7	29
1K														
1998	M	0	25	23	5	16	8	11	4	3	5	5	9	114
	F	0	12	7	7	9	4	7	3	1	4	17	8	79
1999	M	0	21	21	27	8	19	3	10	3	2	8	9	131
	F	0	8	6	10	6	6	8	5	0	2	7	10	68
2000	M	4	19	22	13	15	5	10	4	9	1	11	18	131
	F	1	11	20	6	6	5	10	1	3	3	9	16	91
2001	M	0	20	11	26	3	13	8	13	1	4	7	25	131
	F	0	7	3	10	7	7	3	4	1	4	19	7	72
2002	M	2	13	46	24	26	11	10	2	13	6	16	12	181
	F	3	7	18	9	11	5	7	1	3	2	15	10	91
2003	M	0	19	12	30	6	15	7	3	7	5	15	15	134
	F	0	8	6	14	4	6	6	3	4	10	15	12	88
2004	M	0	8	65	13	27	4	7	2	3	3	18	14	164
	F	2	5	26	2	10	4	2	6	6	1	14	11	89
2005	M	0	24	12	49	10	21	8	6	6	2	16	3	157
	F	0	11	9	12	4	10	6	4	5	4	19	7	91
2006	M	2	14	52	18	22	5	9	6	3	6	15	6	158
	F	0	4	17	6	15	4	5	0	2	1	12	4	70
2007	M	1	39	25	40	12	22	5	7	3	3	15	10	182
	F	1	17	9	17	7	13	2	3	3	2	15	17	106
2008	M	2	7	47	11	26	10	11	4	2	5	9	5	139
	F	1	3	22	7	12	6	7	4	2	5	9	2	80
2009	M	1	10	24	34	11	9	2	10	2	4	8	2	117
	F	0	8	11	18	4	4	1	4	2	3	8	1	64
3B														
1998	M	0	0	1	3	1	2	0	1	2	0	3	5	18
	F	0	1	1	0	2	2	0	0	1	0	4	0	11
1999	M	0	2	1	3	1	3	4	1	0	0	4	2	21
	F	0	0	1	1	1	0	2	0	0	1	5	4	15
2000	M	1	0	9	4	1	2	0	1	4	1	2	1	26
	F	0	1	4	2	1	1	1	1	0	0	3	0	14
2001	M	0	2	6	7	1	4	1	1	2	4	2	4	34
	F	0	3	0	5	2	2	0	2	1	1	1	0	17
2002	M	0	1	7	4	11	5	2	0	5	0	9	3	47
	F	0	0	1	4	7	0	0	2	1	2	1	4	22
2003	M	0	4	2	4	1	8	1	1	1	0	9	5	36
	F	0	3	0	2	1	2	2	1	1	0	5	0	17
2004	M	0	4	9	4	2	6	9	1	4	1	4	0	44
	F	0	0	3	1	0	0	4	0	1	1	6	5	21
2005	M	0	3	3	5	2	0	0	2	1	2	9	2	29

Table 4. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
	F	0	1	0	1	1	1	2	2	1	1	3	1	14
2006	M	0	2	9	3	2	2	2	2	2	1	9	1	35
	F	0	0	1	2	2	1	1	2	2	0	5	0	16
2007	M	0	5	0	8	4	1	1	1	3	4	8	2	37
	F	0	1	1	4	1	2	1	2	0	1	4	0	17
2008	M	0	2	4	3	2	4	0	0	2	3	5	3	28
	F	0	0	2	0	1	0	1	0	0	2	14	2	22
2009	M	0	2	0	8	3	4	0	3	1	0	12	1	34
	F	0	0	0	3	0	0	0	1	1	0	3	0	8

Table 5. 2000-2010 Black Bear Plan management values, criteria, and median ages, Southwest Region, 1998-present.

DAU Year	*n*[a]	% Females	% Males ≥5	# Males[b]	*n*[c]
1G					
1998	103	28	47	74	97
1999	137	35	40	89	117
2000	137	26	34	102	123
2001	131	39	33	80	118
2002	142	34	36	94	129
2003	149	34	34	98	139
2004	137	35	30	89	126
2005	142	32	44	96	140
2006	131	25	35	98	125
2007	170	39	44	104	160
2008	121	36	24	77	110
2009	115	30	39	77	108
3-year avg.	**141**	**35**	**35**	**83**	**128**
Desired levels		**30-40**	**25-35**		
1H					
1998	66	33	32	44	59
1999	52	42	41	30	47
2000	69	45	35	38	60
2001	61	49	29	31	55
2002	72	35	31	47	64
2003	75	45	25	41	66
2004	82	39	38	50	74
2005	87	39	40	53	80
2006	89	48	38	46	85
2007	87	47	35	46	79
2008	115	39	47	70	110
2009	94	31	39	62	84
3-year avg.	**99**	**38**	**41**	**58**	**92**
Desired levels		**≤30**	**≥35**		
1K					
1998	193	41	34	114	176
1999	199	34	37	131	180
2000	222	41	36	131	188
2001	203	35	43	131	171
2002	272	34	34	181	250
2003	222	40	44	134	195
2004	253	35	25	164	228
2005	248	37	38	157	238
2006	228	31	29	158	218
2007	288	37	31	182	261
2008	219	37	31	139	212

Table 5. Continued.

DAU Year	*n*[a]	% Females	% Males ≥5	# Males[b]	*n*[c]
2009	181	35	30	115	178
3-year avg.	**230**	**36**	**31**	**141**	**218**
Desired levels		**30-40**	**25-35**		
3B					
1998	29	38	62	18	24
1999	36	42	58	21	30
2000	40	35	40	26	39
2001	51	33	47	34	47
2002	69	32	48	47	62
2003	53	32	65	36	48
2004	65	32	58	44	60
2005	43	33	50	29	40
2006	51	31	53	35	50
2007	54	31	52	37	52
2008	50	44	56	28	45
2009	42	19	61	33	41
3-year avg.	**49**	**33**	**56**	**31**	**46**
Desired levels		**30-40**	**25-35**		

[a] Number of black bears that were sexed (excluding unknowns).
[b] Number of male black bears that were aged (excluding unknowns).
[c] Total number of black bears that were aged (excluding unknowns).

Table 6. Method of black bear harvest, Southwest Region, 1998-present.

DAU Year	Bait	Hound	Still	Incidental	Other	Total
1G						
1998	22	18	21	38	4	103
1999	23	33	32	46	3	137
2000	30	30	37	36	4	137
2001	29	4	13	2	83	131
2002	36	29	39	36	2	142
2003	42	32	40	35	0	149
2004	38	16	49	33	1	137
2005	45	31	32	32	2	142
2006	41	16	32	40	2	131
2007	70	18	38	37	7	170
2008	37	18	30	35	1	121
2009	60	14	23	17	2	115
1H						
1998	0	25	32	7	2	66
1999	0	24	26	2	0	52
2000	1	20	41	5	2	69
2001	1	23	30	6	1	61
2002	0	23	43	5	1	72
2003	0	31	41	3	0	75
2004	0	23	54	5	0	82
2005	0	29	53	3	2	87
2006	0	23	62	4	0	89
2007	0	29	53	3	2	87
2008	0	39	69	4	3	115
2009	0	34	56	2	3	94
1K						
1998	30	23	61	75	4	193
1999	39	30	81	45	4	199
2000	53	32	72	56	9	222
2001	46	23	26	1	107	203
2002	75	60	73	56	8	272
2003	93	47	40	34	8	222
2004	85	49	65	47	7	253
2005	104	42	53	41	8	248
2006	89	34	65	31	9	228
2007	124	33	88	33	10	288
2008	85	43	50	39	2	219
2009	86	17	47	23	10	181
3B						
1998	0	1	14	14	0	29

Table 6. Continued.

DAU Year	Bait	Hound	Still	Incidental	Other	Total
1999	0	0	10	25	1	36
2000	1	0	18	19	2	40
2001	2	1	15	30	3	51
2002	2	0	23	44	0	69
2003	10	1	23	18	1	53
2004	7	1	34	22	1	65
2005	6	2	23	11	1	43
2006	5	1	31	13	1	51
2007	7	4	21	21	1	54
2008	17	1	21	10	1	50
2009	12	0	15	11	4	42

Table 7. Weapon type used to harvest black bear, Southwest Region, 1998-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1G						
1998	92	8	0	3	0	103
1999	115	14	1	7	0	137
2000	111	17	0	3	6	137
2001	101	15	3	9	3	131
2002	107	23	1	7	4	142
2003	121	16	3	9	0	149
2004	100	25	5	5	2	137
2005	103	26	2	8	3	142
2006	89	31	1	7	3	131
2007	105	45	4	10	6	170
2008	90	20	1	6	4	121
2009	83	25	0	2	6	115
1H						
1998	60	6	0	0	0	66
1999	45	4	1	1	1	52
2000	61	3	0	4	1	69
2001	52	4	1	4	0	61
2002	65	4	0	3	0	72
2003	62	5	0	8	0	75
2004	69	6	2	3	2	82
2005	80	4	0	2	1	87
2006	82	4	1	2	0	89
2007	76	7	0	2	2	87
2008	100	7	2	6	0	115
2009	89	4	0	2	0	94
1K						
1998	170	15	2	6	0	193
1999	162	24	0	13	0	199
2000	180	25	2	10	5	222
2001	169	21	2	9	2	203
2002	202	44	3	17	6	272
2003	164	38	6	8	6	222
2004	191	44	7	8	3	253
2005	186	48	3	7	4	248
2006	173	37	8	7	3	228
2007	223	45	8	11	1	288
2008	169	37	2	9	2	219
2009	141	30	4	6	2	181
3B						
1998	29	0	0	0	0	29

Table 7. Continued.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1999	35	1	0	0	0	36
2000	39	0	0	1	0	40
2001	48	2	0	0	1	51
2002	67	2	0	0	0	69
2003	52	0	0	0	1	53
2004	60	0	0	2	3	65
2005	41	1	0	0	1	43
2006	47	1	0	3	0	51
2007	51	1	0	0	2	54
2008	48	0	0	2	0	50
2009	39	3	0	0	0	42

Table 8. Black bear depredation complaints, Southwest Region, 1998-present.

	DAU				
Year	1G	1H	1K	3B	Total
1998	5	1	5	0	11
1999	4	5	1	0	10
2000	0	2	12	0	14
2001	0	1	1	0	2
2002	0	7	2	0	9
2003	0	2	0	1	3
2004	3	3	0	0	6
2005	0	1	1	0	2
2006	1	5	2	0	8
2007	1	1	0	0	2
2008	0	1	0	0	1
2009	1	2	1	0	4

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	4	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

MAGIC VALLEY REGION

Abstract

Thirty-nine black bears were harvested in 2009 which is 10% lower than the 10-year average of 43 bears taken in DAU 4A. A relatively high proportion of bears were harvested using bait (49%). Most black bears were taken by rifle (77%), but bows (15%), muzzleloaders (5%), and handguns (3%) were also used. The Department recorded 1 bear killed as a result of a vehicle collision.

AREA 4

DAU 4A (GMUs 44, 45, 48, 49)

Management Direction

Management objectives in the 2000-2010 Black Bear Management Plan are to manage the DAU to maintain moderate harvest targets of 25-35% age 5+ black bears in the male harvest and 30-40% females in the total harvest.

Background

The GMUs in DAU 4A are on the southern edge of black bear range in Idaho and black bear densities are relatively low. Harvest in this DAU generally comprises less than 5% of the annual statewide black bear harvest. Urban development in the Big Wood Valley (GMUs 48 and 49) and livestock grazing are the primary influences on black bear habitat in this DAU.

Separate spring and fall seasons were implemented in GMUs 45, 48, and 49 in the 1970s. However, year-round seasons remained in GMU 44 through June 1986 because of livestock industry and landowner concerns. Restrictions on dog use apply in this DAU during October to minimize conflicts with deer and elk hunters.

Population Surveys

Bait station surveys were conducted in DAU 4A from 2003 to 2008, but were ended due to the labor intensity of these efforts relative to the amount of data they provided.

Harvest Characteristics

The 2009 spring and fall hunting seasons were unchanged from 2008. Both seasons followed frameworks adopted in the 2000-2010 Black Bear Management Plan (Appendix A).

Thirty-nine black bears were harvested in 2009, 30% fewer than the 3-year average and 10% fewer than the 10-year average for this DAU. Sixty-seven percent of the black bear harvest occurred during the spring season (Table 1).

Nineteen percent of males harvested in 2009 were ≥5 years old while females made up 31% of the total harvest (Table 2). Despite a relatively low harvest of mature males in 2009, the three year average for sex and age ratios remain consistent with harvest criteria established in the 2000-2010 management plan (Table 3).

Baiting, still-hunting, hound hunting, and incidental take accounted for 49%, 23%, 8%, and 13% of the total hunter harvest of black bears in DAU 4A, respectively (Table 4). One hunter (3%) used a combination of bait and hounds while 2 hunters (5%) reported harvesting a black bear by other means.

Rifles accounted for 77% of the harvest in 2009, bows 15%, muzzleloaders 5%, and handguns 3% (Table 5).

Most of the black bear complaints reported to the Department involve nuisance black bears in the Big Wood River Valley. In 2009, approximately 10 depredation complaints and 40 nuisance bear complaints were received for this DAU (Table 6).

Wildlife Service's personnel handle depredations on livestock. From 1995-2009, we received mortality reports on 25 black bears dispatched by Wildlife Services for this DAU. Though no bears were dispatched in 2009, several bears were removed from campgrounds along the South Fork Boise River and within the Big Wood River Valley and relocated.

Dog-training Season

A standard dog-training season of 1 June-31 July was implemented in 2003 and remained in place through 2009.

Management Implications

Because of the small number of black bears typically harvested in this DAU, management decisions have not been based exclusively on the established monitoring criteria. The data suggest black bear harvest has been moderate (3-year running average of 33% females and 31%

males ≥5 years old in the harvest). Despite harvest that is lower than 2008 and 2007, black bear numbers are believed to have increased in this DAU in recent years as reflected by the increasing trend in the 1983-2009 harvest. This year's reduced harvest fits an observed trend over the past 26 years of roughly 4-5 year population cycles. Higher than normal spring harvest is likely a result of sparse forage during early spring resulting in far roaming bears. This also explains the higher than normal harvest from baiting. Also influencing spring harvest, a mild winter and early spring permitted access where snow depths usually restrict hunters. Though black bear depredation problems remain at tolerable levels, complaints from residents in the Big Wood River Valley and conflicts with campers along the South Fork Boise River have generally risen over the past 15 years.

Table 1. Black bear harvest by season and sex, Magic Valley Region, 1994-present.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
4A									
1994	12	5	17	7	6	13	19	11	30
1995	8	2	10	7	1	8	15	3	18
1996	7	3	10	1	2	3	8	5	13
1997	8	5	13	9	5	14	17	10	27
1998	8	5	13	9	2	11	17	7	24
1999	9	4	13	3	6	9	12	10	22
2000	10	1	11	18	13	31	28	14	42
2001	9	4	13	15	9	24	24	13	37
2002	10	2	12	15	9	24	25	11	36
2003	12	7	19	9	2	11	21	9	30
2004	22	7	29	14	10	24	36	17	53
2005	19	5	24	17	10	27	36	15	51
2006	12	2	14	12	9	24	24	11	35
2007	28	14	42	11	6	17	39	20	59
2008	27	7	34	18	17	35	45	24	69
2009	19	7	26	8	5	13	27	12	39
3-yr. avg.	**25**	**9**	**34**	**12**	**9**	**22**	**37**	**19**	**56**

Table 2. Age distribution of black bear, Magic Valley Region, 1994-present.

DAU		Age											
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Total[a]
4A													
1994	M	1	4	5	3	1	3	0	1	1	0	0	19
	F	0	0	1	1	2	0	1	1	1	0	3	10
1995	M	1	3	2	4	2	0	0	0	0	0	1	13
	F	0	1	0	1	0	1	0	0	0	0	2	5
1996	M	1	0	1	0	3	0	0	1	1	1	0	8
	F	0	0	1	2	2	0	0	0	0	0	0	5
1997	M	2	0	2	4	1	1	1	1	0	0	0	12
	F	1	0	4	1	0	0	1	1	1	0	1	10
1998	M	0	3	2	2	6	2	1	0	1	0	0	17
	F	2	1	1	3	1	0	0	1	0	0	1	10
1999	M	0	4	3	2	0	1	3	2	1	1	0	17
	F	1	2	1	0	1	0	0	0	0	0	1	6
2000	M	0	7	10	3	4	0	2	1	0	0	1	28
	F	0	1	2	2	2	0	2	1	1	0	1	12
2001	M	0	3	3	4	5	6	1	3	0	1	1	27
	F	0	3	2	2	0	5	0	0	0	0	1	13
2002	M	0	2	4	6	1	1	5	3	1	0	1	24
	F	0	0	3	1	1	2	1	0	0	0	2	10
2003	M	1	2	4	4	3	1	2	2	0	1	2	22
	F	0	0	2	0	0	1	0	1	0	0	4	8
2004	M	0	7	10	1	6	4	1	0	3	0	3	35
	F	0	1	4	3	2	0	0	0	2	1	4	17
2005	M	0	6	4	4	3	8	3	0	0	2	6	36
	F	0	2	3	3	0	2	3	1	1	0	0	15
2006	M	0	3	4	2	8	2	2	1	0	0	2	24
	F	0	1	3	0	0	1	2	0	2	0	2	11
2007	M	0	8	4	11	3	4	3	1	0	1	4	39
	F	0	3	2	5	2	2	0	0	3	0	2	19
2008	M	0	2	12	1	11	6	5	5	0	1	2	45
	F	0	2	8	0	1	4	1	1	1	1	5	24
2009	M	0	7	5	6	4	2	1	0	1	1	0	27
	F	0	1	1	1	3	0	1	0	0	0	4	11

[a] Some bears may not have been aged; therefore, totals in this column may differ from totals reported elsewhere in this report.

Table 3. 2000-2010 Black Bear Plan management values and criteria, Magic Valley Region, 1994-present.

DAU Year	*n*[a]	% Females[b]	% Males ≥5	# Males ≥5
4A				
1994	30	37	26	5
1995	18	17	8	1
1996	13	38	38	3
1997	27	37	22	3
1998	27	37	44	4
1999	23	26	25	8
2000	40	30	14	4
2001	42	33	44	13
2002	40	30	44	12
2003	30	27	36	8
2004	52	33	32	11
2005	51	29	53	19
2006	35	31	20	7
2007	60	34	66	13
2008	69	35	26	18
2009	39	31	19	5
3-yr. average	**56**	**33**	**31**	**12**
Desired levels		**30-40**	**25-35**	

[a] Number of black bears that were aged (excluding unknown).
[b] Number of black bears that were sexed (excluding unknown).

Table 4. Method of black bear harvest, Magic Valley Region, 1994-present.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
4A						
1994	6	8	6	9	1	30
1995	6	2	5	5	0	18
1996	2	4	6	1	0	13
1997	6	3	10	8	1	28
1998	1	7	6	10	1	25
1999	6	4	7	5	0	22
2000	3	15	11	12	1	42
2001	6	12	6	13	5	42
2002	4	13	5	13	1	36
2003	15	11	4	3	1	34
2004	15	22	9	9	1	56
2005	13	15	12	11	0	51
2006	12	3	11	7	2	35
2007	26	2	18	5	8[a]	59
2008	11	15	16	21	6[a]	69
2009	19	3	9	5	3[a]	39

[a] Includes the number of black bears that were harvested using a combination of bait and hounds.

Table 5. Weapon type used to harvest black bear, Magic Valley Region, 1994-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
4A						
1994	22	8	0	0	0	30
1995	15	1	0	2	0	18
1996	12	1	0	0	0	13
1997	24	3	0	0	1	28
1998	20	2	0	2	1	25
1999	20	1	0	1	0	22
2000	33	5	1	2	1	42
2001	30	5	2	0	4	41
2002	27	8	0	1	0	36
2003	26	1	1	1	1	30
2004	41	6	0	6	0	53
2005	40	10	0	1	0	51
2006	28	7	0	0	0	35
2007	44	10	0	4	1	59
2008	57	10	0	1	1	69
2009	30	6	2	1	0	39

Table 6. Black bear depredation and nuisance complaints, Magic Valley Region, 1994-present.

DAU	Year	Depredation[a]	Nuisance	Total
4A	1994	1	9	10
	1995	1	4	5
	1996	0	1	1
	1997	2	3	5
	1998	3	5	8
	1999	1	8	9
	2000	4	6	10
	2001	5	3	8
	2002	2	11	13
	2003	0	4	4
	2004	3	15	18
	2005	1	10	11
	2006	0	17	17
	2007	2	63	65
	2008	0	40	40
	2009	0	40	50

[a] Number of black bears killed by Wildlife Services for depredations on livestock.

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	6	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

UPPER SNAKE REGION

Abstract

Black bear harvest increased markedly in all 3 Upper Snake/Southeast Region DAUs from the mid-1990s through the early-2000s, and has remained relatively stable since. In 2002, total black bear harvest in DAUs 4B, 4C, and 4D was the highest ever recorded, to that point, since implementation of the present DAU framework. A total of 198 black bears were harvested which was an increase of 56% over the 1999-2001 average of 127. Reasons for this increase are not well understood, but they may have been the result of drier-than-normal weather conditions, increased popularity of bear hunting, or the liberalized hunting season framework brought on by public perceptions of high predator populations and their potential negative impacts on deer and elk numbers. In 2003, harvest dropped back to a total of 165 bears, similar to the 2000-2002 average of 164, but still above the 1999-2001 average of 127. In 2005, harvest was once again up to 187 and in 2006 harvest dropped to 140. In 2007, bear harvest in DAUs 4B, 4C, and 4D once again reached an all-time high. A total of 243 bears were harvested, which was an increase of 74% over the 2006 harvest. This increased harvest was likely a result of the extremely dry conditions in the region during the 2007 season. Weather conditions during the 2008 and 2009 seasons were fairly normal and harvest dropped back to 167 and 164 bears, respectively.

The 2000-2010 Black Bear Management Plan sets management objectives for DAUs 4B, 4C, and 4D to maintain harvest levels consistent with the "moderate" harvest targets of 25-35% male bears ≥5 years old and 30-40% females in the total harvest, calculated on a 3-year running average. These criteria apply to DAUs with an average annual harvest of ≥30 known-age black bears. For the 3-year running average (2007-2009), DAU 4B was slightly above the female criteria and within the male criteria, suggesting a moderate harvest. DAU 4C harvest was below the female criteria and within the male criteria, indicating a light to moderate harvest. DAU 4D was within the female and male criteria, suggesting a moderate harvest.

Climatic Conditions

Overall, climatic conditions were very favorable throughout this reporting period. The summer of 2009 was moist and the region saw exceptional vegetation growth, creating excellent habitat conditions throughout the region. The winter of 2009-2010 was mild, with less than average

snow pack and crusting. The minimal winter snowpack receded quickly and moist spring conditions led to good forage conditions throughout the spring and early summer of 2010.

Depredations

There were 3 confirmed black bear depredations in the Upper Snake Region during the reporting period (Table 7). These 3 depredations resulted in the loss of 20 domestic lambs. Wildlife Services attempted to trap the offending black bear(s), but were unsuccessful. There were few nuisance bear complaints during the reporting period, likely due to good habitat conditions and mast crops. Department personnel dealt with these few black bear nuisance situations through public education, hazing, and capture and relocation. The total number of nuisance complaints is not available.

No orphaned black bear cubs were captured during this reporting period or during the July 2008 – June 2009 period, compared with 9 cubs (7 singles, 1 pair) that were captured during fall-winter 2007 and transported to wildlife rehabilitation centers in Idaho.

AREA 4

DAU 4B (GMUs 50, 51, 58, 59, 59A)

Abstract

In the past, harvest data has been highly variable and unreliable for this DAU. Harvest had also been too low (<30 black bears) to meet criteria specified in the Black Bear Management Plan. Only 15 black bears were harvested in 1999 and the 3-year average for 1998-2000 was 27. Harvest has stabilized recently and the 3-year average for 2007-2009 was 46 bears. In 2009, 41 black bears were reported harvested.

Management Direction

The 2000-2010 Black Bear Management Plan sets management objectives for DAU 4B to maintain harvest levels consistent with the "moderate" harvest targets of 25-35% male bears ≥5 years old and 30-40% females in the total harvest, calculated on a 3-year running average.

Background

DAU 4B contains relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects. These habitats are marginal for black bear because they grow few berry-producing shrubs. Black bear populations are vulnerable to over-harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of DAU 4B.

Population Surveys

A bait station survey was conducted in GMUs 50, 51, 58, 59, and 59A in July/August 2003 (Table 1). Twenty transects were set up on secondary roads or trails. A pork-fat bait with anis-oil scent were wired to a tree every mile and greater than 100 yards off the transect. GMU 50 had 7 routes with 35 stations, GMU 51 had 4 routes with 20 stations, GMU 58 had 3 routes with 15 stations, GMU 59 had 3 routes with 15 stations, and GMU 59A had 3 routes with 15 stations. Bait stations were set out for 20 days before being checked. A total of 9 baits were visited by bears; 1 in GMU 50, 1 in GMU 51, 5 in GMU 58, 1 in GMU 59, and 1 in GMU 59A. The use of this technique in this region is questionable. With such low bear densities, the hit rates are so low that trend data is considered unreliable. We have discontinued this survey for that reason.

During summer of 2009, the USFWS placed hair snares and motion-sensitive cameras at 70 sites in Units 58, 59, and 59A to investigate the presence of grizzly bears and document other wildlife uses (Servheen et al. 2010). The investigators found black bear hair at 47 of 70 hair snare sites. They documented 78 black bears during the total 917 camera nights the motion-sensitive cameras were deployed and functioning properly. They estimated that an average of 2.17 bears were at each visited site. They also documented 6 sows with twin cubs and 2 sows with single cubs.

Harvest Characteristics

Forty-one black bears were checked from DAU 4B in 2009 (Table 2). This was slightly below the current 3-year average for 2007-2009 of 46. The age distribution of checked black bears from DAU 4B is presented in Table 3.

Harvest management criteria (Table 4) did not technically apply in this DAU in the past due to low average annual harvest. Since 2000, harvest levels have surpassed the minimum of 30 bears. Harvest for the 2007-2009 period was slightly above the desired female harvest criteria (42% females) and within the male harvest criteria (33% males ≥5 years old).

Bait and hound hunters have historically accounted for the majority of the harvest for this DAU (Table 5). This trend continued in 2009. Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 6).

Dog-training Seasons

The 2009 dog-training season ran from 16 June-31 July in DAU 4B.

Management Implications

DAU 4B is to be managed to maintain harvest in the "moderate" range. Harvest for 2007-2009 was slightly above the desired range for the female harvest criteria and within the male harvest criteria, suggesting harvest was moderate.

DAU 4C (GMUs 60, 61, 62, 62A)

Abstract

DAU 4C historically had a low (<30) average annual black bear harvest. Consequently, harvest criteria have not technically applied to this DAU. However, harvest over the last 10 years has exceeded 30 bears. Harvest objectives for DAU 4C have been set to maintain harvest levels consistent with the "moderate" level of harvest. Average harvest over 2007-2009 was below this level for percent females and within the desired level for percent males ≥5 years-of-age.

Management Direction

The 2000-2010 Black Bear Management Plan set management objectives for DAU 4C to maintain harvest levels consistent with "moderate" harvest targets of 25-35% males ≥5 years old and 30-40% females in the total harvest, calculated on a 3-year running average. DAU 4C includes part of the Greater Yellowstone Ecosystem, which supports a grizzly bear population. This DAU is managed to protect that threatened population by prohibiting bait and use of hounds to hunt black bear within the grizzly bear recovery area.

Background

DAU 4C contains a mixture of relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects and moist caldera-type habitat. The drier habitats are marginal for black bear because they grow few berry-producing shrubs, but the moist caldera habitats produce a variety of berry-producing shrubs and represent the best black bear habitat in the region. The livestock industry is a major user of DAU 4C.

Population Surveys

A bait station survey was conducted in parts of GMUs 61 and 62A in 2002 (Table 1). Two partially opened sardine cans were wired to a tree every mile along the transect (secondary road or trail). Four transects were set up: one 9.3 miles in length with 9 bait stations in the Targhee Creek/Dry Creek area, one 32 miles in length with 32 bait stations along Fish Creek Road, one 9 miles in length with 10 bait stations in Black Canyon, and one 7 miles in length with 8 bait stations in the Two Top area. Bait stations were set out 9 July and rechecked 17 July. A total of 5 baits were visited by bears; 1 on the Targhee Creek/Dry Creek transect, 2 on the Fish Creek Road transect, and 1 each on the Black Canyon and Two Top transects. Of the 5 visitations observed, 1 contained a single hair sample consistent with black bear, but the other 4 had no evidence to identify what visited the bait. The use of this technique is questionable in this region. With such low bear densities, the hit rates are so low that trend data is considered unreliable. We have discontinued this survey for that reason.

Harvest Characteristics

Historically, a relatively small number of black bears (<30) were checked from this DAU annually. However, the most recent 3-year average of 63 bears from DAU 4C exceeds the ≥30-

bear criteria set forth in the Black Bear Management Plan (Table 2). Therefore, management criteria in the plan can be used to direct bear management in this DAU.

Males have dominated harvest from this DAU, with spring and fall black bear harvest relatively equally split historically (Table 2). The majority of bears were harvested during the fall season in 2005, 2006, and 2007, but the 2008 harvest was again fairly evenly split between the seasons. For the 2009 season, spring harvest exceeded fall harvest for the first time since 2004. Age distribution of black bear checked from DAU 4C is presented in Table 3. Harvest for the 2007-2009 period was within the desired level for males ≥5 years old (33%) and below the desired level for percent females (20%), indicating a light to moderate harvest (Table 4).

Still/stalk and incidental hunting combined dominate the method of take from this DAU (Table 5). This is due to restrictions on use of bait and hounds to protect grizzly bears in much of the DAU. However, the number of bears harvested over bait has grown and bait was the single most used method of take during the 2009 season (bait and hounds are allowed in Unit 60 and that portion of Unit 61 west of Howard Creek). Rifle is the most popular weapon for hunting in this DAU followed by archery (Table 6).

Dog-training Season

The 2009 dog-training season ran from 16 June-31 July in the portion of DAU 4C open to dog training (that portion of GMU 61 west of Howard Creek in Clark County).

Management Implications

The objectives for DAU 4C are to maintain "moderate" harvest levels. Harvest for the 2007-2009 seasons was within the target for males ≥5 years and below the desired level for percent females, indicating a light to moderate harvest. This population is possibly more lightly harvested than other DAUs in the region because of restrictions placed on baiting and hound hunting to protect grizzly bear in most of the DAU. In an effort to bring DAU 4C into the desired levels for percent female and percent males ≥5 years old in the harvest and to provide more hunting opportunity, the Fish and Game Commission extended the spring take season by 15 days in 2003. That change has increased the number of spring bears taken from an average of 14 during 1994-2002 to an average of 23 during 2003-2009.

DAU 4D (GMUs 64, 65, 66, 66A, 67, 69, 76)

Abstract

With the exception of a low harvest in 2008 (50 bears), black bear harvest in DAU 4D has more than doubled in the 2000s, compared to 1994-1999. The 2009 harvest of 83 bears is slightly higher than the 2007-2009 average for this DAU of 77 bears. Harvest objectives for DAU 4D have been set to maintain harvest levels consistent with the "moderate" level of harvest. Harvest over 2007-2009 was within this level for the female and males harvest criteria.

Management Direction

The 2000-2010 Black Bear Management Plan set management objectives for DAU 4D to maintain harvest levels consistent with "moderate" harvest targets of 25-35% males ≥5 years old and 30-40% females in the total harvest, calculated on a 3-year running average.

Background

DAU 4D contains relatively dry black bear habitats where timber stands are generally distributed on moister north and east aspects. Chokecherry and hawthorn are distributed along some of the streams, and huckleberry occurs in some areas throughout the DAU. These habitats are marginal for black bear because berry-producing shrubs are limited to isolated locations within the DAU. Black bear populations may be vulnerable to over-harvest because the limited habitat is often isolated from adjacent black bear habitat. The livestock industry is a major user of DAU 4D.

Population Surveys

A bait station survey was conducted in GMUs 64, 65, 66, 66A, 67, 69, and 76 in July/August 2004 (Table 1). Twenty transects were set up on secondary roads or trails. A pork-fat bait with anis-oil scent were wired to a tree every mile and greater than 100 yards off the transect. GMU 64 had 1 route with 5 stations, GMU 65 had 1 route with 5 stations, GMU 67 had 5 routes with 25 stations, GMU 66 had 5 routes with 25 stations, and GMUs 66A and 76 had 8 routes with 40 stations. Bait stations were set out for 20 days before being checked. None of these baits were visited by bears. The use of this technique in this region is questionable. With such low bear densities, the hit rates are so low, or in this case nonexistent, that trend data is considered unreliable. We have discontinued this survey for that reason.

Harvest Characteristics

A total of 83 black bears were checked from DAU 4D in 2009 (Table 2). Harvest increased annually from 1998-2004, appeared to level off during 2005-2006, rose again for 2007, dropped substantially for 2008, and came back to around the average for 2009. The average annual harvest for the 2007-2009 seasons was 77. There was a good age distribution of harvested bears in DAU 4D during the 2009 season (Table 3). Harvest values for the 2007-2009 seasons were 29% of male harvest ≥5 years old and 33% of the harvest was female, indicating a moderate harvest (Table 4).

The largest percentage of the black bears harvested in this DAU were taken by baiting, followed by hounds, incidental hunting, and then still/stalk (Table 5). The majority of bears harvested in this DAU were taken with a rifle, followed by archery (Table 6).

Dog-training Season

The 2009 dog-training season ran from 1 June-31 July in DAU 4D.

Management Implications

Management objectives in the 2000-2010 Black Bear Management Plan indicate that this population should be harvested at a moderate level. Harvest opportunity was shortened by 2 weeks for the 2005 season because harvest data suggested the population was being harvested at a moderate to heavy level. Current levels suggest the population is being harvested at a moderate level. We will continue to monitor and use these levels to guide management direction for this DAU.

AREA 5

GMUs 60A, 63, 63A

Management Direction

Historically, the Department did not offer an open season in Area 5 because black bear numbers were low and too sparse to justify a hunting season. However, bear sightings in this Area, and reports of problem bears, have increased over the last few years. Due to this, the Department opened a general black bear hunting season in the Area in 2008. There are no specific harvest expectations in this Area and the primary purpose of the season is to allow the harvest of black bears around human habitation and livestock operations.

Background

Area 5 GMUs are comprised of urban-suburban, irrigated farmland, and drier, desert-like areas. Habitat quality is marginal and few black bears occur in Area 5. Prior to the 2008 hunting season, Area 5 GMUs had no black bear hunting seasons.

Population Surveys

No black bear population surveys are conducted in Area 5.

Harvest Characteristics

Like DAUs 4B and 4C, the 2008 season in Area 5 ran from 30 August-31 October and 15 April-30 June. No bears were harvested in this Area during the 2008 season. One black bear (11 year old female, harvested with hounds and rifle) was taken during the fall 2009 season in Unit 60A.

Dog-training Season

The 2009 dog-training season ran from 1 July-31 July in Area 5.

Management Implications

The Department did not plan to offer an open season in Area 5 during the 2000-2010 planning period, but an increase in reported black bear activity in this area suggested an open season would likely be useful in reducing bear-human conflicts. The expectation is that bear harvest in

this Area will remain low. If the harvest trend increases over time the harvest season should be re-evaluated and specific management objectives should be identified for Area 5.

LITERATURE CITED

Servheen, C., S. Eggeman, and R. Shoemaker. 2010. Surveying for Grizzly Bear Presence in the Beaverhead Mountains of Montana and Idaho: Final Report. University of Montana, Missoula, USA.

Table 1. Bait station survey results, Upper Snake and Southeast Regions, 1992-2004.

GMUs surveyed	Year	Survey dates	Total transects available	Total transects sampled	Total stations sampled	Total stations visited by black bear	% stations visited by black bear
66A, 76	1992	6/24-7/11	16	16	94	0	0.0
	1993	6/24-7/1	18	18	107	1	0.9
	2004[a]	7/16-8/12	8	8	40	0	0.0
66, 66A, 67, 76	1999	6/24-29	23	23	138	0	0.0
64, 65, 66, 67	2004[a]	7/16-8/12	12	12	60	0	0.0
61, 62A	2002[b]	7/9-17	4	4	60	5	8.3
50, 51, 58, 59, 59A	2003[a]	7/2-8/17	20	20	100	9	9.0

[a] All transects were 5 miles in length with 5 bait stations per transect at 1-mile intervals along transects.

[b] Transects ranged in length from 7-32 miles with bait stations at 1-mile intervals along transects.

Table 2. Black bear harvest by season and sex, Upper Snake Region, 1994-present.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
4B												
1994	10	6	0	16	5	4	0	9	15	10	0	25
1995	8	6	0	14	3	1	0	4	11	7	0	18
1996	18	4	0	22	3	3	0	6	21	7	0	28
1997	13	7	0	20	4	3	0	7	17	10	0	27
1998	12	9	0	21	3	4	0	7	15	13	0	28
1999	5	2	0	7	7	1	0	8	12	3	0	15
2000	12	14	0	26	8	4	0	12	20	18	0	38
2001	18	12	0	30	4	5	0	9	22	17	0	39
2002	17	11	0	28	12	7	0	19	29	18	0	47
2003	16	6	0	22	8	5	0	13	24	11	0	35
2004	19	9	0	28	11	3	0	14	30	12	0	42
2005	18	9	0	27	8	1	0	9	26	10	0	36
2006	24	3	0	27	4	2	0	6	28	5	0	33
2007	24	19	0	43	9	6	0	15	33	25	0	58
2008	16	15	0	31	7	6	0	13	23	21	0	44
2009	22	12	0	34	6	2	0	8	28	14	0	42
3 yr. avg.	**21**	**15**	**0**	**36**	**7**	**5**	**0**	**12**	**28**	**20**	**0**	**48**
4C												
1994	6	3	0	9	12	5	0	17	18	8	0	26
1995	8	7	0	15	10	4	0	14	18	11	0	29
1996	12	2	0	14	7	8	0	15	19	10	0	29
1997	12	1	0	13	6	4	0	10	18	5	0	23
1998	4	1	0	5	6	3	0	9	10	4	0	14
1999	14	3	0	17	10	5	0	15	24	8	0	32
2000	8	6	0	14	19	5	0	24	27	11	0	38
2001	13	3	0	16	18	6	1	25	31	9	1	41
2002	12	11	0	23	40	7	0	47	52	18	0	70
2003	11	6	0	17	14	9	0	23	25	15	0	40
2004	20	9	0	29	13	7	0	20	33	16	0	49
2005	18	7	0	25	28	8	0	36	46	15	0	61
2006	8	3	0	11	23	11	0	34	31	14	0	45
2007	18	5	0	23	46	18	1	65	64	23	1	88
2008	26	8	0	34	33	6	0	39	59	14	0	73
2009	24	1	0	25	10	4	0	14	34	5	0	39
3 yr. avg.	**23**	**5**	**0**	**27**	**30**	**9**	**0**	**39**	**52**	**14**	**0**	**67**
4D												
1994	10	3	0	13	5	6	0	11	15	9	0	24
1995	5	3	0	8	7	2	0	9	12	5	0	17
1996	13	4	0	17	5	7	0	12	18	11	0	29
1997	18	5	0	23	9	6	0	15	27	11	0	38

Table 2. Continued.

DAU	Spring				Fall				Entire season			
Year	M	F	U	Total	M	F	U	Total	M	F	U	Total
1998	20	5	0	25	5	3	1	9	25	8	1	34
1999	18	4	0	22	11	11	0	22	29	15	0	44
2000	25	15	0	40	10	6	0	16	35	21	0	56
2001	26	19	0	45	20	14	0	34	46	33	0	79
2002	27	18	0	45	21	15	0	36	48	33	0	81
2003	29	23	0	52	18	20	0	38	47	43	0	90
2004	33	20	0	53	21	18	0	39	54	38	0	92
2005	24	14	0	38	31	21	3	55	55	35	3	93
2006	15	1	0	16	25	21	0	46	40	22	0	62
2007	24	16	0	40	35	22	0	57	59	38	0	97
2008	14	3	0	17	19	14	0	33	33	17	0	50
2009	25	10	0	35	33	14	1	48	58	24	1	83
3 yr. avg.	**21**	**10**	**0**	**31**	**29**	**17**	**0**	**46**	**50**	**26**	**0**	**77**

Table 3. Age distribution of black bear, Upper Snake Region, 1994-present.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
4B														
1994	M	0	2	1	2	5	1	3	0	0	0	0	1	15
	F	0	0	1	1	4	2	0	0	0	0	1	1	10
1995	M	0	3	1	1	2	3	0	0	0	0	1	0	11
	F	0	0	1	1	0	2	0	0	0	1	2	0	7
1996	M	0	3	1	4	5	2	1	1	0	1	2	1	21
	F	1	0	1	1	0	2	0	0	0	1	1	0	7
1997	M	1	2	4	3	3	0	1	2	1	0	0	0	17
	F	0	0	2	2	1	1	1	0	1	1	1	0	10
1998	M	3	1	4	2	1	0	3	0	0	0	1	0	15
	F	4	1	2	2	1	0	0	0	0	0	3	0	13
1999	M	1	1	1	5	1	0	0	1	0	0	1	0	11
	F	0	0	1	0	1	0	1	0	0	0	0	0	3
2000	M	0	4	6	5	2	1	0	0	2	0	0	2	22
	F	0	0	0	6	1	1	0	0	2	1	4	1	16
2001	M	0	3	5	3	3	1	1	4	1	1	0	0	22
	F	0	0	2	1	3	3	1	1	0	0	3	3	17
2002	M	0	4	5	5	4	4	3	0	1	0	3	0	29
	F	0	0	2	5	3	1	0	0	2	0	5	0	18
2003	M	0	1	3	6	6	4	1	1	0	0	2	0	24
	F	0	2	0	1	4	0	0	1	0	0	2	1	11
2004	M	0	2	5	9	3	3	2	2	0	0	3	1	30
	F	0	0	0	1	1	2	0	0	0	1	5	2	12
2005	M	0	3	7	5	2	2	2	2	2	0	1	0	26
	F	1	1	1	1	1	3	0	0	1	0	1	0	10
2006	M	0	1	11	3	2	1	4	2	3	0	1	0	28
	F	0	0	2	0	1	0	0	1	0	0	0	0	4
2007	M	0	5	6	7	2	3	1	2	0	1	3	0	30
	F	0	4	3	3	2	1	4	0	1	0	6	0	24
2008	M	0	1	10	3	1	2	3	1	0	1	0	0	22
	F	0	2	2	2	2	1	1	0	1	4	6	0	21
2009	M	0	0	3	10	5	2	2	2	1	1	1	0	27
	F	1	0	2	3	0	3	1	0	1	0	3	0	14
4C														
1994	M	1	6	1	3	2	1	1	1	0	1	0	1	18
	F	0	1	1	1	1	2	0	0	0	0	2	0	8
1995	M	0	4	1	3	2	2	1	0	0	0	2	3	18
	F	0	0	1	3	1	0	1	1	1	0	2	1	11
1996	M	0	3	3	3	1	3	1	1	0	1	1	1	18
	F	0	2	1	2	1	0	0	0	0	0	3	0	9
1997	M	0	1	2	3	6	3	2	1	0	1	1	1	21
	F	0	0	0	1	2	0	0	0	1	0	1	0	5
1998	M	2	1	0	1	1	1	2	0	0	1	1	0	10

Table 3. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
	F	0	0	0	0	2	0	1	0	0	0	1	0	4
1999	M	0	6	1	3	3	3	2	3	1	1	1	0	24
	F	0	3	0	1	1	1	1	0	0	0	1	0	8
2000	M	0	3	6	6	2	2	3	0	1	2	1	1	27
	F	0	2	2	2	0	1	2	0	1	0	1	0	11
2001	M	0	6	4	5	2	2	2	3	2	1	3	2	32
	F	0	1	3	2[a]	1	0	1	0	0	1	0	0	9
2002	M	0	7	12	15	4	3	2	0	1	2	5	1	52
	F	0	0	1	1	2	3	2	1	0	2	5	1	18
2003	M	0	4	3	5	2	3	0	3	0	0	4	1	25
	F	0	3	3	1	2	2	0	0	0	1	3	0	15
2004	M	0	3	8	5	4	3	2	1	1	2	3	1	33
	F	0	1	4	2	4	2	1	0	1	0	1	0	16
2005	M	4	4	10	6	2	3	1	4	0	0	4	0	38
	F	4	4	10	6	2	3	1	4	0	0	4	0	15
2006	M	0	7	8	4	4	1	1	0	1	0	2	0	28
	F	0	2	2	1	3	2	1	0	0	0	3	0	14
2007	M	4	13	12	7	10	5	3	2	3	0	2	0	61
	F	3	3	6[a]	1	1	3	1	1	0	0	2	0	21
2008	M	1	8	11	2	6	2	4	2	2	3	11	0	52
	F	0	2	3	3	0	0	1	1	1	0	3	0	14
2009	M	0	4	5	3	10	2	0	0	3	2	2	0	31
	F	0	0	3	1	0	0	0	0	1	0	0	0	5
4D														
1994	M	0	3	5	5	2	0	0	0	0	0	0	0	15
	F	1	0	2	3	1	1	0	1	0	0	0	0	9
1995	M	0	0	2	5	0	1	1	0	0	1	0	2	12
	F	0	0	2	2	0	0	0	1	0	0	0	0	5
1996	M	0	0	7	3	2	2	2	0	0	1	1	0	18
	F	1	3	1	2	1	1	0	0	0	1	0	0	10
1997	M	1	2	8	3	4	3	3	1	0	0	1	1	27
	F	0	1	0	3	3	0	2	1	0	0	1	0	11
1998	M	3	3	6	3	3	3	0	3	0	0	1	0	25
	F	1	0	2	1	1	0	1	1	0	1	0	0	8
1999	M	2	6	5	6	2	1	3	1	0	1	1	1	29
	F	2	3	4	0	1	1	1	1	0	0	1	1	15
2000	M	0	6	9	5	5	3	1	3	0	1	2	0	35
	F	0	1	3	4	1	1	1	0	3	1	4	2	21
2001	M	0	8	6	14	9	3	3	1	0	0	2	0	46
	F	0	2	8	5	2	2	2	1	5	1	2	3	33
2002	M	0	2	15	12	5	7	2	1	0	1	2	1	48
	F	2	2	7	5	7	3	2	0	0	0	3	2	33
2003	M	0	10	9	15	1	4	0	2	0	0	5	1	47
	F	1	5	9	9	4	1	6	0	2	0	6	0	43
2004	M	0	8	14	4	12	7	4	1	0	1	3	0	54

Table 3. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
	F	0	3	8	5	6	2	3	1	0	0	9	1	38
2005	M	0	7	13	19	1	10	1	0	0	1	2	0	54
	F	0	2	5[a]	6	4	2	0	1	2	3[a]	10[a]	0	35
2006	M	0	3	15	8	4	2	1	2	1	0	0	0	36
	F	0	3	4	5	1	1	2	0	0	2	3	0	21
2007	M	0	10	11	15	9	4	1	1	0	0	5	0	56
	F	0	3	6	8	5	3	1	1	1	2	5	0	35
2008	M	0	6	5	4	7	4	4	1	1	0	0	0	32
	F	2	3	2	1	3	1	0	0	1	1	1	0	15
2009	M	0	3	13	10	11	6	6	3	0	3	3	0	58
	F	0	4[a]	6	6	1	2	0	0	0	1	4	0	24

[a] One bear of unknown sex.

Table 4. 2000-2010 Black Bear Plan management values and criteria, Upper Snake Region, 1994-present.

DAU Year	*n*[a]	% Females[b]	% Males ≥5	# Males ≥5
4B				
1994	23	39	29	4
1995	17	41	36	4
1996	27	26	35	7
1997	27	37	24	4
1998	28	46	27	4
1999	14	21	18	2
2000	35	43	15	3
2001	34	35	36	8
2002	47	38	24	7
2003	34	31	33	8
2004	39	29	34	10
2005	36	28	35	9
2006	32	13	39	11
2007	54	44	33	10
2008	43	49	32	7
2009	41	34	33	9
3-year avg.	**46**	**42**	**33**	**9**
Desired levels		**30-40**	**25-35**	
4C				
1994	25	32	24	4
1995	25	40	33	5
1996	26	35	41	7
1997	22	23	47	8
1998	14	29	50	5
1999	32	25	46	11
2000	37	30	35	9
2001	40	20	41	13
2002	70	26	20	10
2003	39	38	42	10
2004	48	33	38	12
2005	53	28	32	12
2006	42	33	18	5
2007	82	25	25	15
2008	66	21	46	24
2009	36	14	29	9
3-year avg.	**61**	**20**	**33**	**16**
Desired levels		**30-40**	**25-35**	
4D				
1994	26	35	0	0

Table 4. Continued.

DAU Year	*n*[a]	% Females[b]	% Males ≥5	# Males ≥5
1995	15	33	30	3
1996	27	41	35	6
1997	37	30	31	8
1998	33	24	28	7
1999	42	33	25	7
2000	53	36	29	10
2001	76	39	20	9
2002	81	41	13	6
2003	89	48	24	11
2004	94	41	30	16
2005	86	37	26	14
2006	57	37	17	6
2007	91	38	20	11
2008	47	32	31	10
2009	83	29	36	21
3-year avg.	**74**	**33**	**29**	**14**
Desired levels		**30-40**	**25-35**	

[a] Number of black bears that were aged (excluding unknown).
[b] Number of black bears that were sexed (excluding unknown).

Table 5. Method of black bear harvest, Upper Snake Region, 1994-present.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
4B						
1994	5	11	3	6	0	25
1995	6	8	2	2	0	18
1996	9	14	3	2	0	28
1997	12	8	2	5	0	27
1998	10	8	4	4	0	26
1999	4	4	2	5	0	15
2000	17	9	7	3	0	36
2001	15	10	5	9	0	39
2002	16	10	6	13	2	47
2003	13	7	5	9	1	35
2004	15	20	3	7	1	46
2005	15	11	6	3	1	36
2006	13	12	1	6	1	33
2007	16	25	6	8	3	58
2008	14	20	4	5	1	44
2009	17	19	2	3	1	42
4C						
1994	6	2	11	6	1	26
1995	10	3	8	7	1	29
1996	7	1	13	7	1	29
1997	6	2	12	2	0	22
1998	1	1	4	8	0	14
1999	8	1	7	14	2	32
2000	6	1	21	9	1[a]	38
2001	9	1	17	14	0	41
2002	11	14	21	24	0	70
2003	9	3	11	15	2	40
2004	15	3	17	13	1	49
2005	11	2	20	22	3	58
2006	9	4	18	11	3	45
2007	17	2	15	48	6	88
2008	15	3	37	15	3	73
2009	13	3	11	12	0	39
4D						
1994	10	1	5	8	0	24
1995	8	0	4	5	0	17
1996	13	7	3	5	1	29
1997	25	5	3	4	1	38
1998	12	11	1	7	2	33
1999	19	8	5	12	0	44

Table 5. Continued.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total
2000	30	11	7	5	3	56
2001	38	14	18	6	3[b]	79
2002	31	24	6	15	5	81
2003	35	30	16	8	1	90
2004	44	30	7	14	3	98
2005	29	32	15	15	2	93
2006	16	14	12	18	2	62
2007	36	22	12	22	5	97
2008	15	9	11	14	1	50
2009	31	22	11	15	5	84

[a] Method of harvest not reported for 1 black bear.
[b] Method of harvest not reported for 2 black bears.

Table 6. Weapon type used to harvest black bear, Upper Snake Region, 1994-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
4B						
1994	14	9	1	1	0	25
1995	12	2	0	3	1	18
1996	15	6	1	6	0	28
1997	11	13	0	3	0	27
1998	15	7	0	4	0	26
1999	11	1	1	2	0	15
2000	26	6	2	1	1	36
2001	26	10	0	3	0	39
2002	25	17	0	5	0	47
2003	22	7	1	4	1	35
2004	21	12	0	8	1	42
2005	24	8	0	4	0	36
2006	18	11	0	4	0	33
2007	39	16	0	3	0	58
2008	31	9	0	4	0	44
2009	27	11	0	3	1	42
4C						
1994	18	5	0	3	0	26
1995	21	4	0	4	0	29
1996	21	6	1	1	0	29
1997	16	5	0	1	0	22
1998	9	4	0	1	0	14
1999	24	7	0	1	0	32
2000	27	9	0	2	0	38
2001	29	11	0	1	0	41
2002	46	17	0	7	0	70
2003	28	6	1	5	0	40
2004	32	14	0	1	2	49
2005	34	20	0	4	0	58
2006	32	11	0	2	0	45
2007	65	17	1	4	1	88
2008	50	19	1	2	1	73
2009	28	10	1	0	0	39
4D						
1994	15	7	0	2	0	24
1995	13	4	0	0	0	17
1996	16	10	0	3	0	29
1997	21	7	0	9	1	38
1998	21	6	1	4	1	33
1999	26	13	0	5	0	44

Table 6 Continued

2000	31	20	1	3	1	56
2001	40	25	1	11	2[a]	79
2002	40	19	20	2	0	81
2003	43	37	0	9	1	90
DAU						
Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2004	57	25	1	7	2	92
2005	50	21	0	21	1	93
2006	36	18	1	6	1	62
2007	58	34	0	5	0	97
2008	33	11	0	3	3	50
2009	48	29	0	5	2	84

[a] One bear taken with unknown weapon.

Table 7. Black bear depredation and nuisance complaints, Upper Snake Region, 1994-present.

	4B		4C		4D		Total	
Year	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.	Dep.	Nuis.
1994[a]	0		10		15		25	
1995[a]	1		11		9		21	
1996	0	2	0	11	0	1	0	14
1997	0	0	2	6	4	0	6	6
1998	0	0	0	2	1	0	1	2
1999	1	0	1	0	1	0	3	0
2000	0	2	0	0	0	0	0	2
2001	2	1	3	0	3	1	8	2
2002	2	0	2	0	4	0	8	0
2003	0	0	1	0	5	0	6	0
2004	1	0	0	8	4	4	5	12
2005[b]	1		2		4		7	
2006[b]	1		1		6		8	
2007[b, c]	0		1		0		1	
2008[b,d]	0		0		0		0	
2009[b]	0		0		3		3	

[a] Depredation and nuisance complaints combined.

[b] No exact nuisance data is available.

[c] There were a significant number of nuisance complaints during fall-winter 2007.

[d] There were 5 depredations on sheep in 2008 that USDA Wildlife Services were unable to confirm as black bear.

PROGRESS REPORT
SURVEYS AND INVENTORIES

STATE:	Idaho	**JOB TITLE:**	Black Bear Surveys and Inventories
PROJECT:	W-170-R-34		
SUBPROJECT:	7	**STUDY NAME:**	Big Game Population Status, Trends, Use, and Associated Habitat Studies
STUDY:	I		
JOB:	9		

PERIOD COVERED: July 1, 2009 to June 30, 2010

SALMON REGION

Abstract

Salmon Region is responsible for DAUs 1I, 1J, and 4E. In these DAUs, black bear depredation problems and hunter harvest tend to peak during dry years. Conversely, depredations and harvest are minimal during wet years. For example, in 1994, a dry year, depredation complaints reached an all-time high of 64 complaints and 171 black bears were harvested. In the wet years of 1997 and 1998, there were few depredation problems and approximately 100 black bears were harvested. However, 1999 was also a relatively dry year, but only 100 black bears were harvested. Although the 2000-2010 Black Bear Management Plan specifies moderate to heavy harvest rates in these DAUs, management criteria indicate light harvest rates throughout the region. Accordingly, starting in fall 1999, additional days of hunting opportunity were added to spring and fall seasons in these DAUs. Harvest increased, likely in part due to regulation changes. During 2006, 2007, 2008, and 2009, 163, 265, 205, and 186 bears were harvested, respectively. Approximately 32% of the harvest has occurred during extended seasons over the last 4 years. In 2009, female harvest for bait and hound hunters was 40%, whereas female harvest for incidental and spot/stalk hunters was 35%. This seems to indicate there was not much selectivity in harvest methods.

Climate

Rainfall during summer months in 2009 was above average, with some cool, moist weather during spring and early summer. Vegetative growth appeared well above average. Winter conditions were generally mild, with normal temperatures and below normal precipitation. In general, animals should have entered winter in above average body condition, then encountered a mild winter, which should have produced moderate to high over-winter survival for adults. Snow-pack (as measured at higher elevations) was approximately 69% of average by late winter. Onset of spring weather and associated plant phenology was later than normal in 2010. Water-year precipitation through June 2010 has been approximately 90% of average at both higher elevations (Snotel sites) and low elevations (Salmon weather station). Spring and early summer conditions in 2010 were cool and wetter than average.

AREA 1

DAU 1I (GMUs 34, 35, 36)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 1I is to maintain a heavy harvest rate of <25% males ≥5 years old and >40% females in the harvest (Table 1).

Background

DAU 1I is bordered by the Frank Church Wilderness on the north and includes part of the Sawtooth Wilderness in the south. Virtually all of DAU 1I is land administered by USFS, with small amounts of private land in valley bottoms. The area is covered with high-elevation forest with the exception of open valley bottoms in Unit 36. This area typically receives high snowfall and endures cold winter temperatures. The area receives high recreational use throughout the year. Black bear season structure is currently the same as in other DAUs in the region (Appendix A).

Population Surveys

Monitoring effort involved a non-invasive mark-recapture project by the Southwest region using DNA hair-snags at 77 grid cells (one 28 cell grid and one 49 cell grid) in GMU 33 and 34 (DAU 1K and 1L) on the Boise National Forest, in cooperation with Washington State University (WSU). Each grid cell encompassed 6.25 km^2. One-hundred and seventy-two (172) bear hair samples were sent to lab for genetic analysis with intent of using a mark-recapture model to estimate bear numbers and density within the study area. Seventy-two individuals were marked between the 2 study areas (26 females, 46 males).

Harvest Characteristics

Harvest in 2009 decreased (-39) from the 20-year high in 2007 and from the 3-year average (-16) (Table 2). Sex and age composition of harvest in DAU 1I indicates a much lighter harvest rate than specified in the 2000-2010 management plan (Table 3). The percent of males ≥5 years old increasingly moved away from goal levels from 2001 through 2009, except for a drop toward the goal of <25% in 2005 (Table 4). With the exception of 2008, female harvest has not reached the management goal of >40% in the past 20 years. Use of bait accounted for 50% of black bears harvested in this DAU in 2009 (Table 5). Approximately 40% of bears were taken by still hunters and incidentally to other hunting.

Depredations

Depredations in this DAU usually accounted for the majority of black bear problems in Salmon Region prior to 1994 (Table 7). Complaints were chronic problems with garbage in the same locations each year. The USFS provided bear-proof trash containers for the 1994 season in

Stanley area campgrounds, which helped alleviate some problems. Since then, depredation complaints have decreased. During 2009, there were no depredation complaints (Table 7).

Management Implications

Management direction for this area is to maintain a heavy harvest rate (<25% males ≥5 years old and >40% females in the harvest). Harvest indicator criteria for this DAU suggested a light to moderate harvest rate during the 1990s. Accordingly, the spring 2000 black bear season ending date was extended from 7 to 30 June, creating an additional 24 days to hunt black bears. In addition, the fall 1999 season in GMU 36 opened 30 August, 16 days earlier than in prior years. Harvest during extended seasons increased from 18% of total harvest in 2000 to 65% in 2006, then decreased to 53% in 2009. Currently, harvest indicator criteria suggests a light harvest rate.

DAU 1J (GMUs 21, 21A, 28, 36B)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 1J is to maintain a moderate harvest rate of 25-35% males ≥5 years old and 30-40% females in the harvest (Table 1).

Background

DAU 1J consists of black bear habitat that varies from dense, semi-coastal forests to dry river breaks with patchy timber stands. Much of this DAU is heavily roaded, which makes black bear populations vulnerable to over-harvest.

GMUs in DAU 1J contain some of the best black bear habitat in Salmon Region. However, hunter access is good over much of this DAU, so black bear harvest rates are comparatively high. Annual harvests vary considerably due to weather fluctuations; snow melt patterns in spring and summer drought can concentrate black bears along accessible riparian areas in fall. Black bear season structure mirrors the rest of the region (Appendix A).

Most of DAU 1J is public land, primarily USFS, with some BLM and Idaho state lands. Private property in these GMUs is primarily associated with valley bottoms or patented mining claims.

Harvest Characteristics

During the wet years of 1996-1998, DAU 1J black bear harvest was 53-55 per year, compared to 66-82 per year during the dry 1993-1995 years (Table 2). Typical of dry years, black bear harvest increased dramatically in DAU 1J during 2000 and 2001 (103 and 102, respectively), reaching the highest levels since 1983. A dry weather pattern prevailed in 2002 and harvest reached a new high with 132 bears taken. However, harvest rates since 2000 were confounded by increased hunting opportunity and associated harvest beginning with the 1999 fall season. Harvest increased to 132 animals in 2004, equal to the record high harvest in 2002, but decreased

in 2005 and 2006, to 96 and 71, respectively (Table 2). Harvest in 2009 (93) decreased from that of 2007 and 2008, and was below the 3-year average of 108 (Table 2).

Male age composition of DAU 1J black bear harvest indicates a lighter harvest rate than specified in the 2000-2010 management plan (Table 3); however, the 3-year average for percent females in the harvest is higher than the management goal (Table 4). In 2009, bait and hound hunters accounted for 63% of the harvest and still hunter and incidental take comprised 31% of the harvest.

Depredations

Black bear depredation complaints in past years were primarily related to fruit trees and garbage along Salmon River below North Fork. The USFS installed black bear-proof dumpsters at dumpsites along Salmon River for the 1994 camping season. The dry summer and fall produced very poor forage conditions and a dramatic increase in black bear complaints during 1994 and 2007. Since 1995, complaints have fluctuated widely from 0 to 23 (Table 7). There were no complaints received in 2009 for this DAU.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males ≥5 years old and 30-40% females in the harvest). During the 1990s harvest indicator criteria for percent males ≥5 years old and percent females suggest a light harvest rate. Accordingly, fall 1999 season opened 30 August, 16 days earlier than in prior years, and the spring 2000 black bear season ending date was extended from 15 to 30 June, creating a total of 31 additional days to hunt black bears. Extended season dates accounted for a consistent 16% of harvest during 2001-2003. Harvest during extended season dates ranged from 23% to 27% over the last 6 years. The proportion of females in the harvest has slowly trended upward over the last 10 years and has slightly exceeded 40% during the last 2 seasons. Conversely, the proportion of older males, although variable from year to year, appears relatively stable over the long term.

AREA 4

DAU 4E (GMUs 29, 30, 30A, 36A, 37, 37A)

Management Direction

Follow statewide management direction of the 2000-2010 Black Bear Management Plan. Management direction for DAU 4E is to maintain a moderate harvest rate of 25-35% males ≥5 years old and 30-40% females in the harvest (Table 1).

Background

Units in DAU 4E are generally characterized by mountain valleys separated by rugged mountain ranges. Most black bear habitat occurs in scattered pockets in the mountains. Valleys are generally agricultural land and contain little suitable black bear habitat except along creeks.

Black bear populations are very vulnerable to harvest because of limited, often isolated black bear habitats. Both harvest and pursuit-only seasons are currently in effect (Appendix A).

Population Surveys

No population surveys or management studies were completed in this DAU.

Harvest Characteristics

Prior to the extended season, 25-39 black bears were harvested in DAU 4E (Table 2). In 2009, 62 black bears were harvested, which is slightly below the 3-year average (Table 2). The 3-year average for male age composition of DAU 1J black bear met the goals specified in the 2000-2010 management plan (Table 3); however, percent females in the harvest were higher than desired in 4 of the past 6 years (Table 4). In 2009, bait and hound hunters accounted for 77% of the harvest and still hunter and incidental take comprised 23% of the harvest.

Depredations

Except for 1994 and 2007, unusually dry years, DAU 4E experiences relatively few depredation problems (Table 7). There were 2 depredation complaints in 2009.

Management Implications

Management direction for this area is to maintain a moderate harvest rate (25-35% males ≥5 years old and 30-40% females in the harvest). Fall 1999 season opened 30 August, 16 days earlier than in prior years, and the spring 2000 black bear season ending date was extended from 15 to 30 June, creating a total of 31 additional days to hunt black bears. Extended season dates accounted for approximately 19% of harvest during 2001-2003. Extended season harvest averaged 26% from 2004 to 2009. Harvest levels for this DAU suggest harvest maybe higher than goal levels, particular with regard to female take.

Table 1. Harvest criteria for black bear in Idaho.

Criteria	Light harvest	Moderate harvest	Heavy harvest
Percent females	<30%	30-40%	>40%
Percent males ≥5	>35%	25-35%	<25%
Bait station survey	Increasing	Stable	Decreasing

Table 2. Black bear harvest by season and sex, Salmon Region, 1994-present.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
1I									
1994	16	7	23	18	16	34	34	23	57
1995	9	6	15	21	9	30	30	15	45
1996	9	4	13	8	3	11	17	7	24
1997	8	4	12	7	3	10	15	7	22
1998	6	2	8	7	2	9	13	4	17
1999	17	2	19	16	4	20	33	6	39
2000	22	5	27	17	4	21	39	9	48
2001	18	10	28	14	4	18	32	14	46
2002	16	8	24	15	5	20	31	13	44
2003	16	9	25	9	3	12	25	12	37
2004	23	8	31	9	5	14	32	13	45
2005	18	9	27	9	6	15	27	15	42
2006	28	4	32	6	2	8	34	6	40
2007	27	13	40	21	8	29	48	21	69
2008	19	14	33	3	3	6	22	17	39
2009	20	3	23	5	2	7	25	5	30
3-yr. avg.	**22**	**10**	**32**	**10**	**4**	**14**	**32**	**14**	**46**
1J									
1994	26	11	37	31	14	45	57	25	82
1995	24	20	44	14	15	29	38	35	73
1996	25	8	33	18	4	22	43	12	55
1997	20	10	30	12	11	23	32	21	53
1998	27	7	34	14	5	19	41	12	53
1999	29	5	34	9	7	16	38	12	50
2000	46	14	60	30	13	43	76	27	103
2001	53	19	72	23	7	30	76	26	102
2002	44	23	67	44	21	65	88	44	132
2003	43	16	59	3	11	14	46	27	73
2004	51	25	76	35	21	56	86	46	132
2005	43	26	69	15	11	27	58	37	96
2006	37	22	59	9	3	12	46	25	71
2007	53	36	89	24	14	38	77	50	127
2008	40	31	71	16	16	32	56	47	103
2009	43	30	73	12	8	20	55	38	93
3-yr. avg.	**45**	**32**	**78**	**18**	**13**	**31**	**63**	**45**	**108**
4E									
1994	11	9	20	10	6	16	21	15	36
1995	18	6	24	6	9	15	24	15	39
1996	13	4	17	3	5	8	16	9	25
1997	17	8	25	1	3	4	18	11	29

Table 2. Continued.

DAU	Spring			Fall			Entire season		
Year	M	F	Total	M	F	Total	M	F	Total
1998	9	9	18	2	6	8	11	15	26
1999	25	9	34	0	5	5	25	14	39
2000	17	16	33	6	3	9	23	19	42
2001	27	11	38	4	5	9	31	16	47
2002	27	15	42	16	14	30	43	29	72
2003	24	10	34	11	6	17	35	16	51
2004	26	13	39	9	11	20	35	24	59
2005	27	27	54	7	5	12	34	32	66
2006	32	14	46	3	3	6	35	17	52
2007	31	20	51	15	3	18	46	23	69
2008	28	23	51	5	7	12	33	30	63
2009	25	24	49	8	5	13	33	29	62
3-yr. avg.	**28**	**22**	**50**	**9**	**5**	**14**	**37**	**27**	**65**

Table 3. Age distribution of black bear, Salmon Region, 1994-present.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
1I														
1994	M	0	4	8	2	3	5	1	1	2	1	3	4	34
	F	0	2	4	1	3	0	0	1	1	0	6	5	23
1995	M	1	4	1	2	4	1	2	2	1	2	4	4	28
	F	0	1	2	3	0	0	0	1	0	2	5	1	15
1996	M	0	2	3	2	2	3	1	1	0	0	1	2	17
	F	1	0	1	0	1	0	1	1	0	0	2	0	7
1997	M	0	0	0	4	6	3	1	0	0	0	0	1	15
	F	0	1	0	1	0	2	0	0	0	0	1	2	7
1998	M	0	0	1	1	5	1	2	0	0	0	2	1	13
	F	0	0	1	0	1	0	1	0	0	1	0	0	4
1999	M	0	1	4	4	1	5	3	5	1	1	1	6	32
	F	0	1	0	0	0	1	0	2	0	0	1	1	6
2000	M	0	2	5	11	7	1	2	2	2	2	1	5	40
	F	0	0	1	0	0	2	0	1	0	0	4	1	9
2001	M	0	3	5	6	4	5	0	0	0	1	4	4	32
	F	0	2	0	0	1	2	0	1	0	0	7	1	14
2002	M	0	0	5	7	5	2	3	1	1	1	5	0	30
	F	0	0	1	0	4	3	0	1	0	0	3	0	12
2003	M	0	6	3	2	1	3	0	1	0	2	4	3	25
	F	0	0	0	3	0	3	1	0	1	2	1	1	12
2004	M	1	0	7	3	3	5	3	4	0	1	2	3	32
	F	0	1	3	1	0	2	2	0	0	0	2	2	13
2005	M	0	0	7	7	3	4	0	1	1	1	1	2	27
	F	0	3	0	3	0	0	2	1	1	0	3	2	15
2006	M	0	1	2	1	7	0	3	5	0	1	6	8	34
	F	0	0	1	0	1	1	0	0	1	0	0	2	6
2007	M	0	6	1	13	1	14	0	3	0	2	5	3	48
	F	0	3	0	3	1	4	0	2	3	0	4	1	21
2008	M	0	0	1	1	4	2	6	2	3	0	3	0	22
	F	0	1	0	0	4	1	1	1	3	0	4	2	17
2009	M	0	1	1	10	0	5	1	3	1	0	3	0	25
	F	0	0	0	1	0	1	1	0	1	0	1	0	5
1J														
1994	M	0	10	9	8	11	4	2	0	4	0	8	1	57
	F	0	3	1	2	5	4	1	2	0	0	6	1	25
1995	M	1	3	8	6	5	3	5	1	1	2	3	1	39
	F	0	2	7	8	2	9	0	0	0	2	7	0	37
1996	M	0	3	3	9	10	3	5	1	1	1	5	2	43
	F	0	0	0	2	4	1	1	1	1	1	1	0	12
1997	M	0	5	4	4	3	6	0	2	3	0	4	1	32

Table 3. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
	F	0	2	2	2	2	4	0	0	1	1	3	4	21
1998	M	0	4	9	5	2	5	4	2	3	0	1	6	41
	F	0	0	1	1	1	1	2	1	2	0	3	0	12
1999	M	0	3	1	6	3	4	6	2	4	3	4	2	38
	F	0	1	1	4	0	1	0	2	0	0	2	1	12
2000	M	0	6	20	6	16	5	3	5	5	3	3	4	76
	F	0	2	7	2	7	0	2	0	3	0	4	0	27
2001	M	0	8	11	16	9	10	0	5	1	2	9	5	76
	F	0	3	0	3	1	1	2	3	1	1	10	1	26
2002	M	0	10	18	8	13	11	9	2	5	3	8	0	87
	F	0	3	8	4	10	2	5	3	0	1	6	0	42
2003	M	1	4	5	6	5	6	7	4	2	0	6	0	46
	F	0	6	1	3	2	2	2	1	0	0	10	0	27
2004	M	1	5	24	10	12	6	15	4	0	0	4	5	86
	F	0	3	11	2	12	3	5	1	2	0	6	1	46
2005	M	0	10	3	13	2	7	7	6	4	3	3	0	58
	F	0	2	1	8	3	2	1	2	3	3	10	2	37
2006	M	0	0	6	4	4	1	7	3	4	2	4	10	45
	F	0	0	6	0	7	1	1	1	3	1	3	3	26
2007	M	0	11	5	11	2	11	1	8	3	3	9	13	77
	F	2	5	2	17	2	2	0	2	0	5	7	6	50
2008	M	0	1	14	6	12	5	6	1	4	1	3	3	56
	F	0	3	8	2	9	1	3	3	3	2	11	2	47
2009	M	0	1	7	21	1	7	4	5	3	1	4	1	55
	F	0	0	5	7	2	6	3	0	2	1	9	3	38
4E														
1994	M	1	5	4	0	4	1	0	1	1	0	2	2	21
	F	1	1	1	4	2	0	1	0	0	0	5	0	15
1995	M	0	2	1	8	5	4	0	0	0	2	2	2	26
	F	0	0	2	4	1	0	0	1	0	0	4	2	14
1996	M	0	1	1	3	5	1	3	0	0	0	2	0	16
	F	0	1	0	2	2	0	1	0	0	0	3	0	9
1997	M	0	0	4	3	3	2	0	3	2	0	0	1	18
	F	0	0	0	3	2	1	0	0	0	0	4	1	11
1998	M	0	1	4	0	0	1	1	1	2	1	0	0	11
	F	0	2	3	0	2	2	3	0	0	0	2	1	15
1999	M	0	3	7	1	1	2	4	4	3	0	0	0	25
	F	0	1	2	3	0	1	0	0	2	1	3	1	14
2000	M	0	1	3	3	11	1	0	2	0	0	0	2	23
	F	0	1	6	3	1	0	1	1	1	0	3	2	19
2001	M	0	2	6	5	4	9	1	0	2	0	2	0	31
	F	0	0	2	4	0	1	0	2	2	1	3	1	16
2002	M	0	2	14	7	7	2	5	0	1	1	3	0	42

Table 3. Continued.

DAU		Age												
Year	Sex	Cub	1	2	3	4	5	6	7	8	9	10+	Unknown	Total
	F	0	4	6	4	0	1	1	0	1	2	8	0	27
2003	M	0	4	2	4	7	7	3	2	0	0	3	3	35
	F	0	0	2	1	0	4	3	0	0	0	4	2	16
2004	M	1	6	6	3	4	0	2	3	5	0	4	1	35
	F	1	1	8	0	2	1	1	2	1	0	7	0	24
2005	M	0	5	5	3	3	5	6	1	1	0	4	1	34
	F	0	2	4	2	3	8	1	1	0	0	10	1	32
2006	M	0	1	6	1	7	4	5	3	2	1	2	3	35
	F	0	2	2	2	3	0	0	0	2	0	2	4	17
2007	M	1	7	5	16	2	2	1	1	2	1	4	4	46
	F	0	2	0	6	0	3	1	3	1	1	3	3	23
2008	M	0	2	11	4	5	2	3	1	2	1	1	1	33
	F	0	0	5	2	7	1	0	2	2	2	7	2	30
2009	M	0	4	4	6	4	7	0	1	1	1	4	1	33
	F	0	0	5	5	1	3	2	1	0	3	7	2	29

Table 4. 2000-2010 Black Bear Plan management values and criteria, Salmon Region, 1994-present.

DAU Year	*n*[a]	% Females	% Males ≥5[b]	# Males ≥5[b]
1I				
1994	57	40	43	13
1995	45	33	46	12
1996	24	29	40	6
1997	22	32	29	4
1998	17	24	42	5
1999	38	16	62	16
2000	49	18	29	10
2001	46	30	36	10
2002	42	29	43	13
2003	37	32	46	10
2004	45	29	52	15
2005	42	36	32	8
2006	40	15	58	15
2007	68	31	53	24
2008	39	44	73	16
2009	30	17	52	13
3-year avg.	**46**	**31**	**58**	**18**
Desired levels		**>40**	**<25**	
1J				
1994	81	31	31	17
1995	73	48	39	15
1996	55	22	39	16
1997	54	40	48	15
1998	53	23	43	15
1999	50	24	64	23
2000	103	26	33	24
2001	102	25	38	27
2002	132	33	44	38
2003	73	36	54	25
2004	132	34	36	29
2005	96	39	52	30
2006	71	36	60	21
2007	127	39	55	35
2008	103	46	37	20
2009	93	41	44	24
3-year avg.	**108**	**42**	**44**	**27**
Desired levels		**30-40**	**25-35**	
4E				
1994	36	42	26	4

Table 4. Continued.

DAU Year	*n*[a]	% Females	% Males ≥5[b]	# Males ≥5[b]
1995	39	39	33	8
1996	25	36	41	6
1997	29	38	41	7
1998	26	58	55	6
1999	39	36	52	13
2000	43	45	14	3
2001	47	34	45	14
2002	72	40	29	12
2003	51	31	43	15
2004	59	41	41	14
2005	66	48	52	17
2006	52	33	53	17
2007	69	33	26	11
2008	63	48	31	10
2009	62	47	44	14
3-year avg.	**65**	**42**	**34**	**12**
Desired levels		**30-40**	**25-35**	

[a] Number of black bears for which sex was determined (excluding unknown).
[b] Number of black bears for which age was estimated (excluding unknown).

Table 5. Method of black bear harvest, Salmon Region, 1994-present.

DAU Year	Bait	Hounds	Still	Incidental	Other	Total[a]
1I						
1994	12	11	15	16	0	54
1995	8	8	6	19	0	41
1996	9	4	2	9	0	24
1997	7	4	4	7	0	22
1998	1	3	5	8	0	17
1999	14	5	10	10	0	39
2000	25	2	10	12	1	50
2001	20	6	7	11	2	46
2002	19	1	17	6	1	44
2003	17	4	10	6	1	38
2004	24	1	10	9	1	45
2005	28	3	7	4	0	42
2006	29	3	4	3	1	40
2007	25	7	24	11	2	69
2008	22	9	7	2	0	39
2009	15	1	12	0	2	30
1J						
1994	15	26	17	23	0	81
1995	13	22	18	20	0	73
1996	18	16	10	10	1	55
1997	11	17	10	15	1	54
1998	13	15	9	14	2	53
1999	12	17	10	10	1	50
2000	37	15	33	15	3	103
2001	33	17	23	18	11	102
2002	34	21	43	31	3	132
2003	32	13	10	12	6	73
2004	44	15	41	30	2	132
2005	51	11	14	16	4	96
2006	44	7	16	3	1	71
2007	71	0	30	20	6	127
2008	61	4	23	12	3	103
2009	56	3	16	13	5	93
4E						
1994	4	14	8	9	1	36
1995	12	9	6	12	0	39
1996	9	5	6	5	0	25
1997	9	12	2	6	0	29
1998	11	5	3	7	0	26
1999	15	12	5	5	2	39
2000	18	10	7	7	0	42
2001	28	5	4	7	3	47
2002	28	11	9	23	0	71
2003	26	14	4	8	0	52

Table 5 Continued

DAU Year	Bait	Hounds	Still	Incidental	Other	Total[a]
2004	19	12	6	12	10	59
2005	32	15	3	15	1	66
2006	31	7	4	4	6	52
2007	37	7	4	17	4	69
2008	42	12	8	4	1	63
2009						

[a] The sum of method types may exceed the total because hunters can identify multiple methods.

Table 6. Weapon type used to harvest black bear, Salmon Region, 1994-present.

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
1I						
1994	43	7	0	5	1	56
1995	34	5	0	6	0	45
1996	18	2	0	4	0	24
1997	17	2	0	3	0	22
1998	12	3	0	2	0	17
1999	28	9	1	1	0	39
2000	37	9	0	2	0	48
2001	30	10	0	5	1	46
2002	34	7	1	2	0	44
2003	24	9	0	1	1	35
2004	32	12	0	1	0	45
2005	23	15	1	0	3	42
2006	23	14	0	2	1	40
2007	45	18	2	3	1	69
2008	23	13	0	2	1	39
2009	19	8	2	1	0	30
1J						
1994	60	13	0	8	0	81
1995	57	9	0	5	2	73
1996	46	7	0	2	0	55
1997	43	8	1	2	0	54
1998	41	8	2	2	0	53
1999	42	7	0	1	0	50
2000	84	14	1	2	2	103
2001	86	10	3	3	0	102
2002	110	16	1	3	0	130
2003	55	15	0	2	1	73
2004	111	14	1	4	2	132
2005	73	21	0	0	2	96
2006	57	10	2	2	0	71
2007	97	25	1	2	2	127
2008	81	20	0	1	1	103
2009	70	19	0	3	1	93
4E						
1994	25	6	2	3	0	36
1995	28	7	0	4	0	39
1996	21	2	0	1	1	25
1997	21	5	0	3	0	29
1998	20	3	0	2	1	26
1999	22	7	0	9	1	39
2000	28	9	0	4	1	42
2001	30	13	1	3	0	47
2002	51	12	3	5	1	72
2003	40	9	0	1	1	51

Table 6 Continued

DAU Year	Rifle	Archery	Muzzleloader	Handgun	Other	Total
2004	41	14	2	1	1	59
2005	43	18	4	1	0	66
2006	40	9	1	1	1	52
2007	53	13	2	1	0	69
2008	44	15	1	2	1	63
2009	47	12	1	2	0	62

Table 7. Black bear depredation complaints, Salmon Region, 1994-present.

	DAU			
Year	1I	1J	4E	Total
1994	11	33	20	64
1995	0	6	1	7
1996	0	12	0	12
1997	0	0	0	0
1998	12	11	4	27
1999	2	1	0	3
2000	0	18	0	18
2001	1	2	1	4
2002	1	9	5	15
2003	0	3	1	4
2004	2	8	1	11
2005	5	13	3	21
2006	0	3	0	3
2007	27	23	11	61
2008	2	5	1	8
2009	0	0	2	2

APPENDIX A

IDAHO

2009 SEASON

BLACK BEAR RULES

Idaho
Big Game
Seasons and Rules
2009

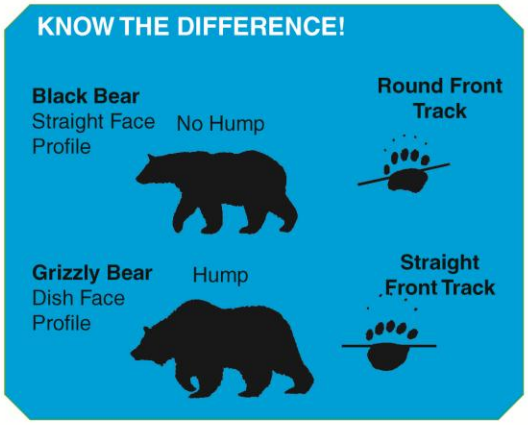
Idaho Fish and Game photo

Deer, Elk, Pronghorn
August 2009 - January 2010

Black Bear, Mountain Lion
August 2009 - July 2010

Including Controlled Hunts for
Deer, Elk, Pronghorn, and Black Bear

2009 Fall / 2010 Spring Black Bear Hunting Seasons



General Rules

• Apply for spring controlled hunts Jan 15-Feb 15.

• Apply for fall controlled hunts May 1-June 5.

Bag Limit: No person may take more black bears than he or she has legal tags for.

Female Black Bear With Young: No female black bear accompanied by young may be taken.

Evidence of Sex: For black bear, external evidence of sex (either scrotum, penis, or testicles for males or vulva for females) must be left naturally attached to the hide until the mandatory check requirement has been satisfied.

Capturing Black Bears: No person may trap, snare or otherwise capture or hold black bears.

Mandatory Check and Report: Any hunter killing a black bear must, ***within 10 days of kill:***

- Present the skull and hide to an Idaho Fish and Game regional office, official check point, or a Fish and Game conservation officer for removal and retention of a premolar tooth and to have the hide tagged with an official state export tag. No person shall have, **except** during the open season and for 10 days after the close of the season, any raw black bear pelt that does not have an official state export tag attached (either Idaho's or another state's official export tag).
- A hunter may authorize another person to comply with the above requirements if that person possesses enough information to accurately complete the necessary form.
- Please thaw your black bear hide and skull before bringing it in for tagging or staff may not be able to complete check-in.

Fish and Game's headquarters office is not equipped to check in bears. In the Boise area, these animals can be checked at the Fish and Game regional office in Nampa, (3101 S. Powerline Road, 208-465-8465) between 8 a.m. and 5 p.m. or by appointment at the Garden City facility, 109 W. 44th St., 208-327-7099.

Dump Grounds: No person may hunt or pursue a black bear at any time within 200 yards of the perimeter of any designated dump ground or sanitary landfill.

Special Tags

Second tags

Second tags issued for black bear may be used only in that portion of Unit 16 north of the Selway River and all of Units 10, 12, 16A, 17, 19, 20, 20A, 26, and 27. Nonresident black bear tags used in these units are available for $31.75.

Nonresident Deer Tag Used for Black Bear or Mountain Lion

(Please see page 74.)

Nonresident Reduced Bear Tags

(Please see page 74.)

Bait

Bait is any substance placed to attract game animals. Bait may be used to hunt black bear and only under the following conditions:

Time: No bait or bait containers may be placed for the purpose of attracting or taking black bear before the opening of black bear take season. Except in Units 10, 12, 16A, 17, 19, 20, 20A, 26, and 27, where bait may be placed up to 7 days before the take season.

- All bait containers and materials must be removed, and all excavations refilled no later than 7 days after the close of each season; spring, fall, or dog training.

Location: No bait site may be located within 200 feet of any water (lake, pond, reservoir, year-round free-flowing spring, or year-round free-flowing stream), or within 200 yards of any maintained trail or any road.

- No bait site may be located within 1/2 mile of any designated campground or picnic area, administrative site, or dwelling.

Bait: No parts of domestic or wild origin game animals, game birds, game fish or protected nongame wildlife may be used as bait.

- The skin must be removed from any mammal parts or carcasses used as bait.

Containers: No bait may be contained within paper, plastic, glass, metal, wood, or other nonbiodegradable materials, **except** that a single metal container with a maximum size of 55 gallons may be used if securely attached at the bait site.

- No bait may be contained in any excavated hole greater than 4 feet in diameter.

Establishment of Bait Sites: Any structures constructed at bait sites and all materials must be removed by the permit holder within 7 days after the close of each take season; spring or fall.

- All bait sites must be visibly marked at the nearest tree or on the bait container using a tag supplied by Fish and Game.

Baiting Permit: Baiting permits are issued by mail or in person from Fish and Game regional and sub-regional offices beginning March 1 of each year.

- Baiting permits will be valid in the calendar year for which they are issued.

Use of Baiting Permit: All persons placing bait must possess a baiting permit issued by Fish and Game.

- A hunter may possess only 1 Fish and Game baiting permit each year and may maintain up to 3 bait sites, except the number of bait sites maintained by outfitters may be specified by the land management agency in the outfitter's operating plan.
- Bait site tags are valid for spring and fall seasons in the calendar year for which they are issued.
- No person may hunt over an unlawful bait site.
- Guides and clients of outfitters are not required to obtain a baiting permit, but they must have a copy of the outfitter's permit in their possession while hunting over a bait site.
- Possession of a Fish and Game baiting permit does not exempt the permit holder from any restrictions placed on users of federal, state, or private lands.

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Hound Hunting

Anyone hunting with hounds, unless hunting with an outfitter, must have a hound hunter permit. (Please see section on hound hunting rules on page 66)

Bear Identification

To prevent mistaken identity, bear hunters are encouraged to learn to identify black bears and tell them from grizzly bears in the wild. The Montana Fish, Wildlife and Parks bear identification training program is available at: http://fwp.mt.gov/bearid/default.html.

This link is provided for educational purposes only. Idaho hunters are not required to pass the test to buy a black bear tag.

Grizzly bears may be found in 3 areas of Idaho: the Panhandle in big game units 1, 2, 4, 7 and 9; the Bitterroot Mountains along the Idaho/Montana border in big game units 10, 12 and 17; and Southeast Idaho in the Yellowstone Ecosystem in big game units 60, 61, 62, 62A, 65, and 67.

For safety tips while hunting in grizzly bear country, taking the bear identification training program, and reporting grizzly bear observations, please visit the Fish and Game grizzly bear webpage at: http://fishandgame.idaho.gov/cms/wildlife/grizzlies/.

⇩	Fall 2009 / Spring 2010 Black Bear Seasons (Females with young are protected!)			
Units	**Take Season**	**Dogs Prohibited**	**Dog Training**	**Notes**
1	Aug 30 - Sep 14 *(Archery only)* Sep 15 - Oct 31 Apr 15 - May 31	Jan 1 - Dec 31	None	*Bait prohibited,* *Caution: grizzly bears may be encountered*
2, 3, 5	Aug 30 - Oct 31 Apr 15 - May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	None	
4, 4A, 6	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - April 30	Jun 1 - Jul 31	
7, 9	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	
8	Aug 30 - Oct 31 Apr 15 -May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 -Apr 30	None	
8A, 10A	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	*Bait prohibited*
10, 12	Aug 30 - Nov 3 Apr 1 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	*2 bear bag limit* *Caution: grizzly bears may be encountered*
11	Aug 30 - Oct 31 Apr 15 - May 15	Oct 10 - Oct 31 Apr 15 - May 15	None	
11A	Aug 30 - Oct 31 Apr 15 - May 15	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	None	
13	Aug 30 - Oct 31 Apr 15 - May 15	Oct 10 - Oct 31 Apr 15 - Apr 30	None	
14, 18	Aug 30 - Oct 31 Apr 15 - May 31	Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	
15	Aug 30 - Oct 31 Apr 15 - May 31	Aug 30 - Sep 14 Oct 10 - Oct 31 Apr 15 - Apr 30	Jun 1 - Jul 31	
16	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31 Apr 15 - Apr 30	Jul 1 - Jul 31	*North of Selway River: 2 bear bag limit* *Remainder of unit: 1 bear bag limit*
16A, 17, 19, 20, 20A	Aug 30 - Nov 18 Apr 1 - Jun 30	Sep 15 - Oct 31	None	*2 bear bag limit* *Caution: grizzly bears may be encountered in Unit 17*
19A	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	
21, 21A, 28, 36B	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 10 - Oct 31	Jul 1 - Jul 31	
22, 31, 32, 32A	None		May 23 - Jul 31	*Bait prohibited,* *Motorized Vehicle Restriction in Units 32& 32A, See note 2, Page 58*
23	Aug 30 - Oct 31 Apr 15 - May 31	Oct 1 - Oct 31	Jun 1 - Jul 31	
24, 25	Aug 30 - Oct 31 Apr 15 - May 31	Oct 5 - Oct 31	Jun 1 - Jul 31	

(continued)

Fall 2009 / Spring 2010 Black Bear Seasons (Females with young are protected!)				
Units	**Take Season**	**Dogs Prohibited**	**Dog Training**	**Notes**
26, 27	Aug 30 - Nov 18 Apr 1 - Jun 30	Sep 15 - Oct 31	Jul 1 - Jul 31	*2 bear bag limit*
29, 30, 30A, 36A, 37, 37A	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jul 1 - Jul 31	*Motorized Vehicle Restriction, See note 2, Page 58*
33	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 5 - Oct 31	Jun 16 - Jul 31	*That portion of Unit 33 within the Middle Fork of the Payette River drainage downstream from but excluding Powder House Gulch drainage is* ***closed*** *during dog training season.*
34, 35, 36	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 5 - Oct 31	Jul 1 - Jul 31	
39	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 5 - Oct 31	Jun 16 - Jul 31	
43, 44, 45, 48, 49	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	*Motorized Vehicle Restriction in Units 45, 48 & 49, See note 2, Page 58*
50, 51, 58, 59, 59A	Aug 30 - Oct 31 Apr 15 - Jun 15	Oct 1 - Oct 31	Jun 16 - Jul 31	*Motorized Vehicle Restriction, See note 2, Page 58*
60	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	None	***Caution****: grizzly bears may be encountered*
60A, 63, 63A	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jul 1 - Jul 31	
61	Aug 30 - Oct 31 Apr 15 - Jun 30	Oct 1 - Oct 31	Jun 16 - Jul 31 west of Howard Creek in Clark County **only**.	*Bait and dogs prohibited in Fremont County and east of Howard Creek in Clark County ,* ***Caution****: grizzly bears may be encountered*
62, 62A	Aug 30 - Oct 31 Apr 15 - Jun 30	Jan 1 - Dec 31	None	*Bait and dogs prohibited,* ***Caution****: grizzly bears may be encountered*
64, 65, 66, 66A, 67, 69, 76	Aug 30 - Oct 31 Apr 15 - May 31	Oct 1 - Oct 31	Jun 1 - Jul 31	*Motorized Vehicle Restriction in Units 66 & 69, See note 2, Page 58,* ***Caution****: grizzly bears may be encountered in Units 65 & 67*

Fall 2009 Black Bear Controlled Hunts (165 Permits) (Females with young are protected!)				
Hunt No.	**Controlled Hunt Areas**	**Permits**	**Season Dates**	**Notes**
8501	1	15	Sep 15 - Oct 9	*Bait prohibited. See note 1, Page 58*
8502	22* (see pg 58)	75	Sep 1 - Oct 31	*Bait prohibited, Dogs prohibited Oct 1 - Oct 31, See note 1, Page 58*
8503	32* (see pg 58)	75	Sep 1 - Oct 31	*Bait prohibited, Dogs prohibited Oct 1 - Oct 31, See note 1, Page 58 Motorized Vehicle Restriction, See note 2, Page 58*

* *See controlled hunt area descriptions.* This hunt includes other units or parts of other units.
For details on controlled hunt rules and restrictions, please see pages 70-73.

Spring 2010 Black Bear Controlled Hunts (150 Permits) (Females with young are protected!)				
Hunt No.	**Controlled Hunt Areas**	**Permits**	**Season Dates**	**Notes**
8001	22* (see pg 58)	75	Apr 1 - May 22	*Bait and dogs prohibited*
8002	32* (see pg 58)	75	Apr 1 - May 22	*Bait and dogs prohibited, Motorized Vehicle Restriction, See note 2, Page 58*

Notes:

1. Controlled hunt permittees must have a hound-hunter permit to use dogs in this hunt. Any dogs used must be under the control of the permittee.
2. Motorized vehicle use as an aid to hunting for wildlife is restricted to established roadways open to motorized vehicle traffic capable of travel by full-sized automobiles – any motorized vehicle with a gross vehicle weight in excess of 1,500 pounds. See Page 68.

* See controlled hunt area descriptions. This hunt includes other units or parts of other units.

Black Bear Controlled Hunt Area Descriptions

Hunt Area 1 – That portion of Unit 1 within the following boundary: Beginning at the Idaho/Washington state line where it intersects the Pend Oreille River, then northward along the Idaho/Washington state line to the Lamb Creek drainage, then southeasterly along the northern edge of the Lamb Creek divide to Priest Lake, then along the southern shore of Priest Lake to the Soldier Creek drainage, then easterly along the northern edge of the Soldier Creek drainage to the Selkirk Divide, then southerly along the Selkirk Divide to Baldy Mountain, then easterly along Little Sand Creek to the Pend Oreille River, then westerly along the northern shore of the Pend Oreille River to the point of beginning and that portion of Unit 1 within the following boundary: Beginning at the confluence of the Moyie River and the Kootenai River, then west and north on the Kootenai River to the Copeland Bridge, then east on County Road 45 to the junction with State Highway 1, then south on State Highway 1 to the intersection with State Highway 95, then north and east on State Highway 95 to where State Highway 95 crosses the Moyie River, then south on the Moyie River to the point of beginning.

Hunt Area 22 — All of Units 22 and 31.

Hunt Area 32 — All of Units 32 and 32A.

Idaho Fish and Game photo

Submitted by:

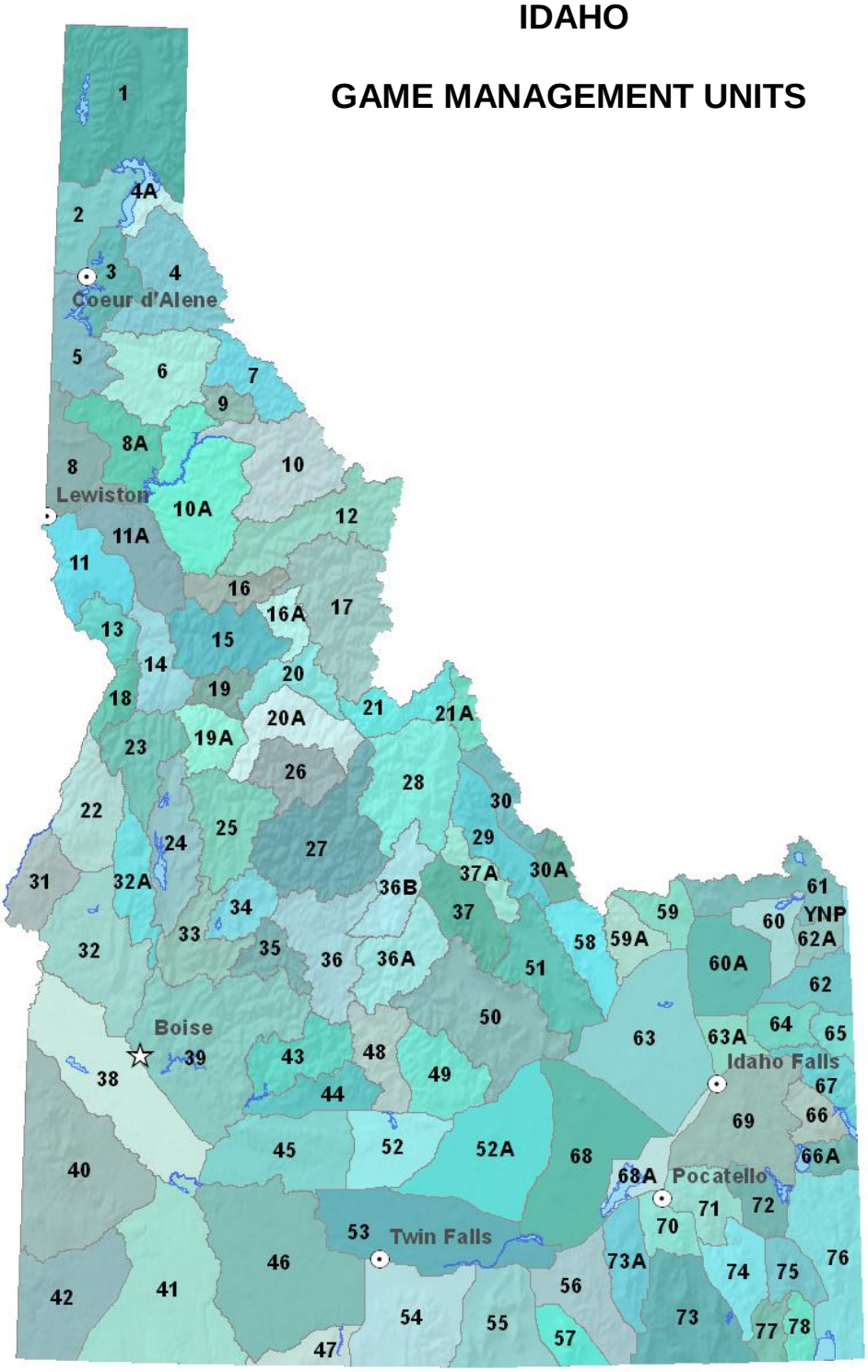
Jim Hayden	Jay Crenshaw	Jeff Rohlman
Regional Wildlife Manager	Regional Wildlife Manager	Regional Wildlife Manager
Randy Smith	Daryl Meints	Tom Keegan
Regional Wildlife Manager	Regional Wildlife Manager	Regional Wildlife Manager

Approved by: IDAHO DEPARTMENT OF FISH AND GAME

Brad Compton, Asst. Chief	Jeff Gould, Chief
Bureau of Wildlife	Bureau of Wildlife

IDAHO

GAME MANAGEMENT UNITS



FEDERAL AID IN WILDLIFE RESTORATION

The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer's excise tax collected from the sale of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program then allots the funds back to states through a formula based on each state's geographic area and the number of paid hunting license holders in the state. The Idaho Department of Fish and Game uses the funds to help restore, conserve, manage, and enhance wild birds and mammals for the public benefit. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes necessary to be responsible, ethical hunters. Seventy-five percent of the funds for this project are from Federal Aid. The other 25% comes from license-generated funds.